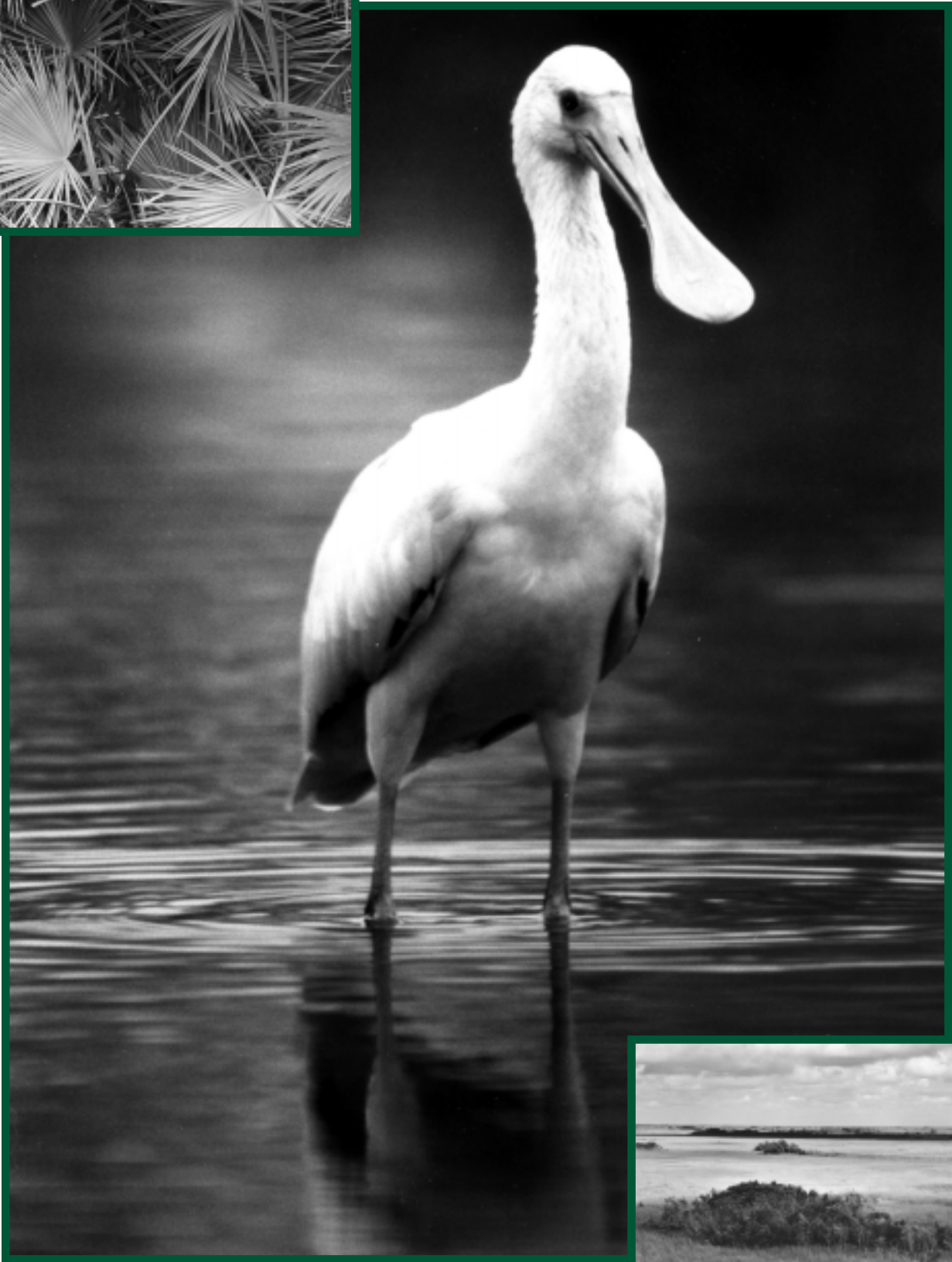


# Everglades National Park



1999 Annual Report

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## Credits

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The 1999 Annual Report and general park information are available on our web site at [www.nps.gov/ever](http://www.nps.gov/ever). These materials may also be obtained by contacting:

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Everglades National Park is pleased to submit its annual report for 1999. The past year has seen continued progress in meeting the challenges and opportunities of preserving this great national treasure for the benefit of current and future generations of Americans.

The park continues to implement the principles of performance-based management, in order to assure that our efforts are effective in meeting the mission and goals set forth for the park and that our investments are wisely made on behalf of the American people. This report outlines our major mission and long term goals, as well as our accomplishments over the year in working toward their achievement.

Visitation continues to increase, following the post-Hurricane Andrew drop, with clear economic benefits for our local community neighbors. Our fee demonstration project has yielded a unique source of funding to address maintenance back logs, thus leading to an enhanced and safer experience for all our visitors.

Strong public concern from the people of Florida and the nation remain the foundation on which efforts to restore and protect the park and the greater Everglades ecosystem depend. I am pleased to report continued progress in those efforts. Support by the Administration and the Congress produced sustained appropriations that are vital for completion of the park's expansion in East Everglades for restoration of water flows through the northeast Shark Slough. Additional funds were made available for the Federal/State partnership to acquire vital buffer areas adjacent to national park unit boundaries, and elsewhere in the South Florida ecosystem to protect habitats, provide land for the hydrological restoration of South Florida and to increase water storage and filtration capacity.

Construction funds for changes to the water management system to restore hydrology in the park were also provided, as were special science support funds to make sure restoration proceeds based on the best available information and knowledge. Park staff contributed significantly to the improvement of the major, long-term redesign of the regional water management system, which was formally presented to the Congress by the U.S. Army Corps of Engineers in July 1999. This comprehensive approach may well represent our last, best chance to assure a healthy functioning Everglades for the future.

Until the water management system can be structurally and operationally changed through restoration projects now underway and planned for the future, park wildlife may face continuing perils in the future. Thanks to dry winter conditions, the Cape Sable Seaside Sparrow managed to hold its own this year. The sparrow has seen a 60% decline in its numbers, due to unnaturally wet conditions in the west and unnaturally dry conditions in the east, causing significant detrimental impacts to its habitat.

Throughout the year, park staff dealt with a multitude of ecological and operational issues with a commitment to excellence deserving of the highest recognition, and in addition, calmly and efficiently went about the business of preparations and recovery from two significant hurricanes and one tropical storm. These events are the norm for this region, but park staff reflected credit on themselves and the park by their professionalism and assistance to the local community. This issue is dedicated to the staff of Everglades National Park.

Richard G. Ring



Superintendent Richard G. Ring

## A Message from the Superintendent

### Park Purpose and Significance

Everglades National Park is a public park for the benefit and enjoyment of the people. It is set apart as a permanent wilderness preserving essential primitive conditions, including the natural abundance, diversity, behavior, and ecological integrity of the unique flora and fauna.

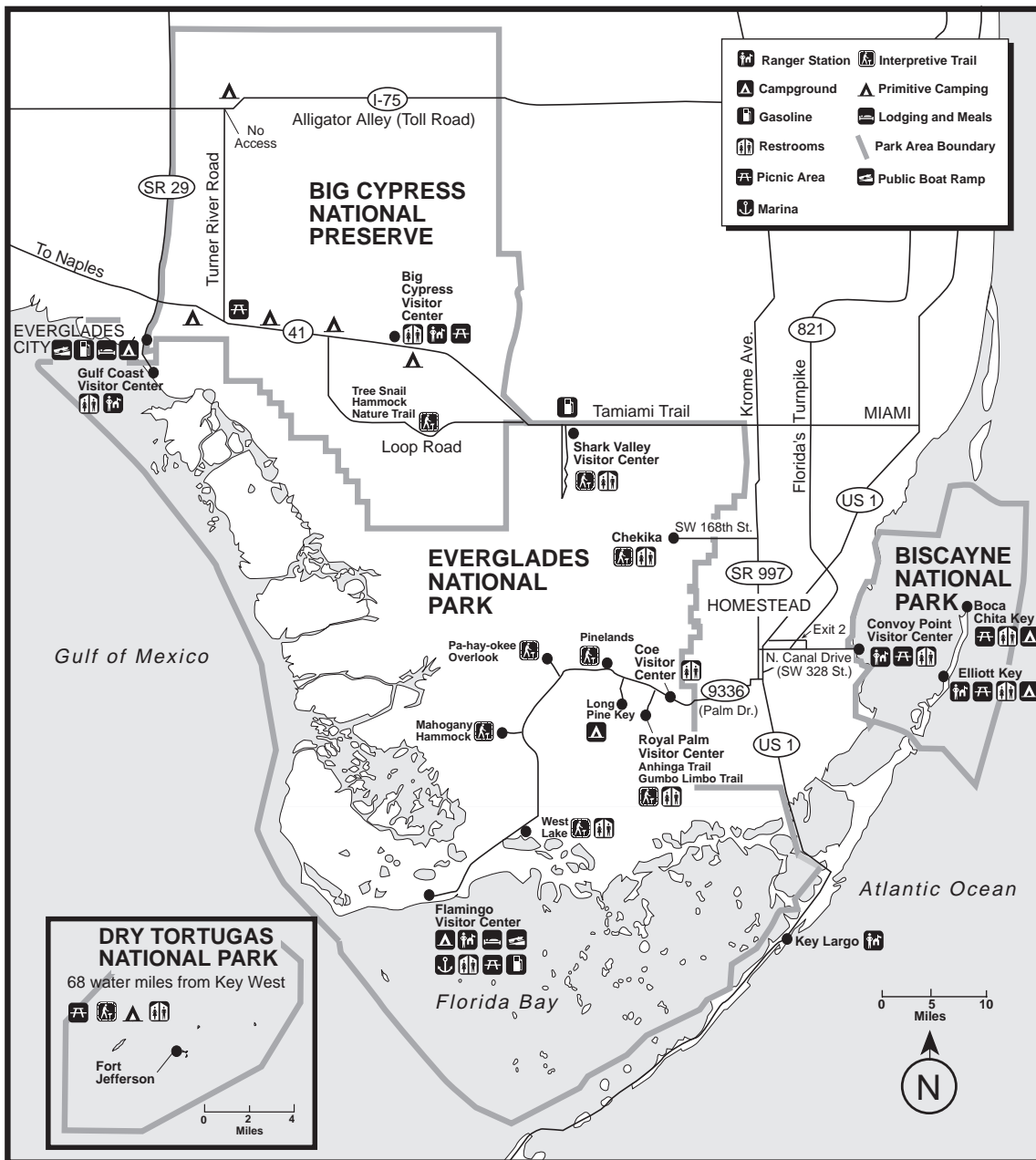
It is nationally and internationally important because it:

- qualifies as a world heritage site, a biosphere reserve, a wetland of international importance, and an outstanding Florida water
- supports the largest stand of protected sawgrass prairie in North America
- serves as a crucial water recharge area for South Florida through the Biscayne aquifer
- provides sanctuary for 14 threatened and endangered species
- supports the largest mangrove ecosystem in the western hemisphere
- constitutes the largest designated wilderness in the Southeast that provides foraging habitat and breeding grounds for migratory wading birds
- contains important cultural resources and is the homeland of the Miccosukee Tribe of Indians of Florida
- functions as a nationally significant estuarine complex in Florida Bay, providing a major nursery ground that supports sport and commercial fishing
- comprises the only subtropical reserve on the North American continent, presenting a major ecological transition zone where diverse temperate and tropical species mingle
- functions as a major corridor and stopover for neotropical migrants in the South Florida ecosystem
- encompasses resources that directly support significant economic activities
- engenders inspiration for major literary and artistic works
- offers a place where recreational, educational, and inspirational activities occur in a unique subtropical wilderness.



Everglades National Park is one of four areas of the National Park System in South Florida. The park encompasses 1,509,000 acres, stretching more than sixty miles north to south and forty miles east to west. It holds the largest expanse of wilderness east of the Rocky Mountains; 1,296,500 acres of this vast national park are protected as designated wilderness.

## Park Map



### Park Facilities

Since the establishment of Everglades National Park, the development of visitor facilities has progressed according to a concept of preserving the park's wilderness qualities and keeping developmental encroachments to a minimum. This concept is consistently reflected in the park's legislation, planning and management. Developed areas reflect, and are limited to patterns already existing in 1934.

The original footprint of park development was established in the 1950's and early 1960's and was complete by 1964. As a result of the National Environmental Policy Act (NEPA) and other environmental legislation enacted in the early 1970's, there has been greater regulation of resource impacts from park construction. While park facilities have been periodically upgraded to meet changing standards and codes, there has been a consistent focus on minimizing development. Sensitive planning, design and construction ensure park facilities are appropriate, sustainable and of the highest quality. Today, the developed areas remain basically unchanged from the 1960's, occupying "less than 1,200 acres...", less than 0.1% of the 1.4 million acres contained within the original park boundary.

Rehabilitation of existing facilities at Shark Valley and West Lake and planning for the same at Flamingo and the East Everglades emphasizes meeting today's life-safety codes, accessibility concerns, and modern expectations, while limiting the development to previously disturbed areas. Where possible, disturbed areas will be restored to their natural state.

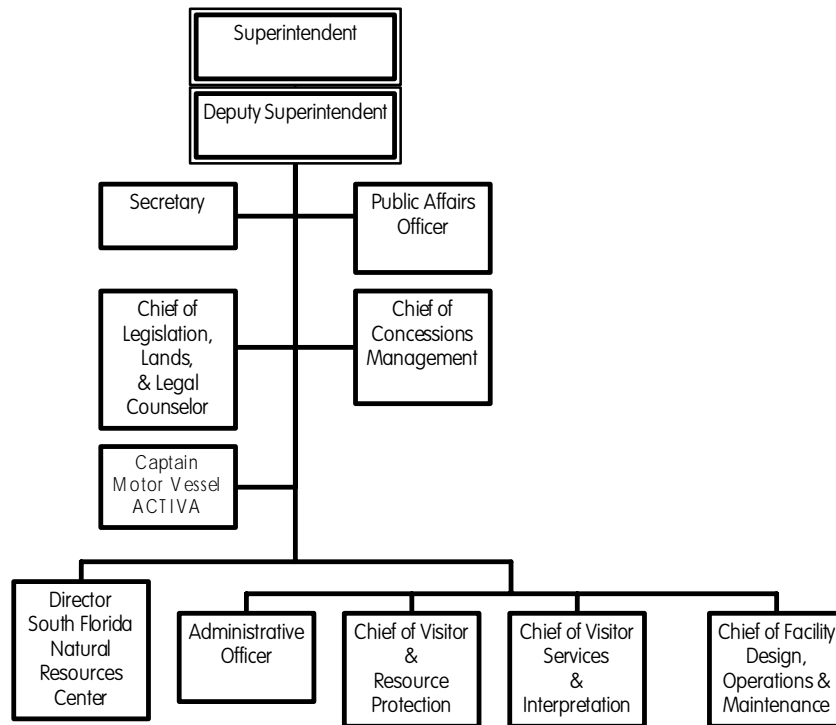
#### Development and Facilities

82 miles of surfaced roads  
156 miles of trails (including canoe trails)  
5 miles of surfaced trails  
2 miles of elevated boardwalk trails:  
    Anhinga Trail, Pa-hay-okee Overlook, Mahogany Hammock, West Lake, Eco Pond, Shark Valley  
160 educational signs and exhibits  
3 campgrounds:  
    Flamingo, 295 sites  
    Long Pine Key, 108 sites  
    Chekika, 20 sites  
48 designated backcountry campsites  
3 fee collection stations:  
    Main Entrance, Chekika, and Shark Valley  
301 buildings:  
    5 visitor centers  
    headquarters  
    maintenance and utility buildings  
    2 research facilities  
    2 environmental education camps  
    housing for park and concession employees  
3 concessioners:  
    **Flamingo Lodge, Marina, and Outpost Resort**  
    motel and housekeeping cottages; restaurant; gift shop; marina and store; rental boats, houseboats, and canoes; sight-seeing boat tours.  
    **Shark Valley Tram Tours**  
    sight-seeing tram tours, rental bicycles, snacks.  
    **Everglades National Park Boat Tours**  
    sight-seeing boat tours, rental canoes, gift shop, snacks.

Flamingo is the park's main center for boating, fishing, camping, and wilderness travel. Park and concession facilities support wilderness exploration.

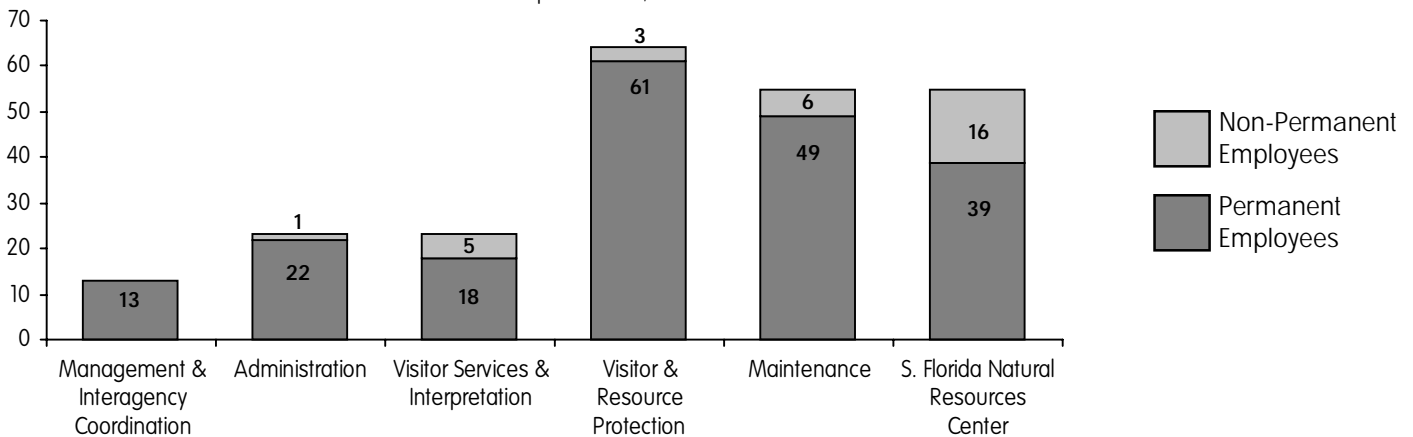


# Park Organization



## Total Employees by Division

As of September 30, 1999



Donn Whitenight, Supply Technician, receives incoming supplies.

# South Florida Ecosystem Restoration

The National Park Service plays a vital role in efforts to restore the South Florida Ecosystem, an 11,000 square mile region extending from the Kissimmee River near Orlando to the Florida Keys. Originally a vast expanse of wetland, pineland, wilderness, mangroves, coastal islands and coral reefs; this is now one of the continent's most highly populated and manipulated regions. The four national park units of South Florida protect about 2.5 million acres that embody some of the best and most complete examples of the natural and cultural history of South Florida.

The natural systems of the four parks also sustain South Florida's quality of life and economy. They are vital to the survival of fish, wildlife and recreational areas that support the region's \$13 billion annual tourist industry. The Everglades provide and protect the fresh water that enables people to live and do business in much of this area. It is the source of drinking water for 5 million people and sustains a productive agricultural industry. Today, these parks are among the most threatened in the nation due to external development and population pressures. Their survival is linked to efforts to restore portions of the larger ecosystem as well as its original functions and to lay the basis for a sustainable future for the region.

## Partnerships for Restoration

The good news is the growing awareness of all interests in the region that there are limits imposed by nature on the volume and manner of growth. A strong public and private partnership is addressing the immediate needs of the natural system and is exploring ways of achieving and maintaining a sustainable future for South Florida.

Building on the State of Florida's commitment to "Save Our Everglades", the **South Florida Ecosystem Restoration Task Force** and **Working Group** coordinates and develops consistent policies, strategies, plans, programs, and priorities for restoring the South Florida ecosystem. The **Governor's Commission for a Sustainable South Florida**, appointed by Governor Lawton Chiles, served from March 1994 to May 1999, to "make recommendations for achieving a healthy Everglades ecosystem that can coexist and be mutually supportive of a sustainable South Florida economy and quality communities," and served as an advisory body to the Task Force. Recognizing the continuing need for an advisory body, representing the diverse citizens and organizations with an interest in Everglades restoration and South Florida issues, Governor Jeb Bush created the **Governor's Commission for the Everglades** on July

### South Florida Ecosystem Restoration Partners

#### -Task Force-

Department of the Interior (TF Chair)  
Department of Agriculture  
Department of the Army  
Department of Commerce  
Department of Justice  
Department of Transportation  
U.S. Environmental Protection Agency  
Miccosukee Tribe of Indians of Florida  
Seminole Tribe of Florida  
State of Florida

#### -Working Group-

U.S. Environmental Protection Agency (WG Chair)  
Atlantic Oceanographic and Meteorological Laboratory/NOAA  
Bureau of Indian Affairs  
Department of Justice  
Federal Highway Administration  
Florida Keys National Marine Sanctuary/NOAA  
National Marine Fisheries Service/NOAA  
Natural Resources Conservation Service  
U.S. Army Corps of Engineers  
U.S. National Park Service  
U.S. Geological Survey  
USGS, Biological Resources Division  
U.S. Fish and Wildlife Service  
Miccosukee Tribe of Indians of Florida  
Seminole Tribe of Florida  
Office of the Governor of Florida  
Florida Department of Agriculture and Consumer Affairs  
Florida Department of Community Affairs  
Florida Department of Environmental Protection  
Florida Game and Freshwater Fish Commission  
Florida Department of Transportation  
Governor's Commission for a Sustainable South Florida  
South Florida Water Management District  
Broward County Department of Natural Resources  
Dade County Department of Environmental Resources  
Palm Beach County Planning Department  
Palm Beach County Water Utilities Department  
Southwest Florida Regional Planning Council

1, 1999. The Commission will review and provide recommendations on implementation of the Central & Southern Florida Project Restudy, give practical recommendations to the Task Force, and help reconcile differences among stakeholder interests. The **National Park Service** actively participates in the ecosystem restoration efforts, as members of the Working Group, the first Governor's Commission, and other restoration groups. NPS staff are involved in establishing goals for ecosystem restoration, evaluating the design and implementation of restoration projects, conducting scientific research, and monitoring field conditions to measure progress. Through ongoing interpretive and outreach programs, the South Florida parks are also committed to educating the public about the need for restoring the ecosystem.



## Restoration Goals and Objectives

### Get the Water Right

- Reestablish natural hydrologic functions in wetlands while providing for the water resource needs of the built environment.
- Maximize the system's hydrologic interconnection.
- Reduce the amount of water leaving the system, or lost to tide.
- Decentralize the Water Conservation Areas (WCAs).
- Replace the system's lost water storage capacity.
- Minimize seepage of groundwater from the natural system into urban and agricultural areas.
- Prevent point source and non-point source pollution from agricultural and urban runoff.



Recovery of threatened and endangered species, such as the Wood Stork, is one goal of ecosystem restoration.

### Restore and Enhance the Natural System

- Maximize spatial extent of wetlands and other habitats by acquiring land needed for restoration purposes.
- Recover threatened and endangered species.
- Restore natural biological diversity and natural vegetation communities.
- Halt and reverse the invasion of exotic plant and animals.
- Reestablish sustainable wading bird populations and colonies.
- Reestablish wildlife corridors.
- Restore natural estuarine and coastal productivity.
- Increase hard coral cover on reefs.

### Transform the Built Environment

- Revitalize urban core areas to reduce outward migration of suburbs and improve the quality of life in core areas.
- Implement best management practices in urban and agricultural areas to improve water quality and reduce water consumption.
- Link agricultural and urban growth management with ecosystem management.

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## Restoration in Action - Accomplishments in 1999

- The *Integrated Feasibility Report and Programmatic Environmental Impact Statement for the Central and Southern Florida Project Comprehensive Review Study* was submitted to Congress on July 1, 1999 for approval.
- The Governor's Commission for a Sustainable South Florida (GCSSF) completed its assessment of the Corps of Engineers' October 1998 Draft Comprehensive Plan. After extensive stakeholder input, the Commission produced the *Restudy Plan Report* in January 1999, which recommends providing additional water storage; expansion of the scope of the Restudy and coordination with other projects; improving water quality; and providing assurances to current water users that they will not suffer loss of existing water use from the Restudy. The Commission also recommended that once water promised by the Restudy is delivered to the natural system it will be maintained permanently. The Commission completed the following reports: *Report on the January 25, 1999 Draft Implementation Plan of the C & SF Project Restudy*; *Funding the Restudy of the Central and Southern Florida Project*; and *Planning for 2050: A Conceptual Plan to Achieve Sustainable Communities in South Florida*.
- The *Governor's Commission for the Everglades* was created by Governor Jeb Bush on July 1, 1999.
- The South Florida Ecosystem Restoration Working Group:
  - established a task team to develop a comprehensive, interagency strategy for eliminating and/or controlling invasive exotic plants;
  - created a *Public Outreach and Participation Strategy* to promote broad-based understanding and long-term support by residents, visitors and national interests for actions to restore, protect and sustain South Florida;

## Everglades National Park

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Construction of two new bridges on the Main Park Road at Taylor Slough began in 1999. The project is part of the Everglades restoration program designed to restore historical water flows through the slough into Florida Bay.

- sponsored the South Florida Restoration Science Forum that focused on strengthening the linkage between managers and scientists in the development of science-based decisions for the restoration, preservation, and protection of the ecosystem while promoting a sustainable South Florida;
- initiated the effort to develop a Comprehensive Water Quality Strategy for South Florida to provide better integration of water quality protection efforts;
- established a task team that developed the *Aquifer Storage and Recovery Issue Team Draft Assessment* outlining actions and identifying projects to address uncertainties associated with regional ASR;
- developed a consensus-based priority land acquisition list for the Secretary of the Interior so that he could address a directive given in the National Park Service Appropriations Bill for FY 99;
- completed a draft report focusing on redefining agriculture's role in South Florida's economy, landscape, environment and social culture;
- initiated development of an outcome oriented Strategic Plan, as directed by Congress, that will clearly outline how ecosystem restoration will occur, include measurable goals, performance measures, resources, annual goals and assign accountability for accomplishing actions.
- sponsored a workshop on the Modified Water Deliveries Project to give Working Group members a better understanding of the issues associated with project implementation.
- In FY 99, the National Park Service (NPS) acquired approximately 6,849 acres in the East Everglades Addition to Everglades National Park. Congress authorized the addition of 109,503 acres to the park in 1989. Acquisition of the remaining 35,870 acres must occur before the Modified Water Deliveries Project can be implemented.
- The National Park Service FY 2000 budget request for Everglades restoration includes: the final \$20 million needed for land acquisition in Everglades National Park, \$11.8 million for Big Cypress National Preserve land acquisition, \$600,000 for land acquisition in Biscayne National Park and \$45.6 million for joint federal/state acquisitions elsewhere in the ecosystem; \$8 million to the park to support a critical studies initiative within the south Florida ecosystem; \$12 million toward completion of Modified Water Deliveries Project structural alterations to restore water flows into the northeast section of the park.
- The Committee on Restoration of the Greater Everglades Ecosystem was established by the National Research Council of the National Academy of Sciences to serve as an outside scientific advisory and review panel for the South Florida ecosystem restoration effort.
- The Everglades Construction Project, implemented in accordance with the 1994 Everglades Forever Act, consists of six large constructed wetlands, known as Stormwater Treatment Areas (STAs), that will receive 1.4 million acre-feet per year of stormwater runoff from the Everglades Agricultural Area, adjacent watersheds, and regulatory releases from Lake Okeechobee. The STAs will treat incoming water through naturally-occurring biological and physical processes to remove phosphorus. Water from the STAs will be used to improve water flow, timing, quantity and quality in the Everglades. Approximately 47,651 acres are needed to build the STAs. In FY 99, acquisition of approximately 1,800 acres remained. Operation of STA 1W and STA 2 began in FY 99.

As part of the 1995 reorganization of the National Park Service, park system management is being approached along the lines of peer management teams. These teams address and resolve issues affecting the allocations of resources, personnel actions, and sharing of specialized expertise among members. This is in contrast to the traditional resolution of these issues from a higher level in the organization.

These management teams have been constituted Service-wide in various "clusters". These are generally along the lines of geographic proximity; a modified ecosystem approach to defining National Park System management. Everglades is a member of the Gulf Coast Cluster, which incorporates 21 NPS areas from the Caribbean to Louisiana.

**The Gulf Coast Cluster**  
 Big Cypress National Preserve  
 Biscayne National Park  
 Brices Crossroads National Battlefield Site  
 Buck Island Reef National Monument  
 Cane River Creole National Historical Park  
 Christiansted National Historic Site  
 De Soto National Memorial  
 Dry Tortugas National Park  
 Everglades National Park  
 Gulf Islands National Seashore  
 Jean Lafitte National Historical Park and Preserve  
 Natchez National Historical Park  
 Natchez Trace Parkway  
 New Orleans Jazz National Historical Park  
 Poverty Point National Monument  
 Salt River Bay National Historical Park  
 and Ecological Preserve  
 San Juan National Historic Site  
 Shiloh National Military Park  
 Tupelo National Battlefield  
 Vicksburg National Military Park  
 Virgin Islands National Park

## Everglades National Park and the Gulf Coast Cluster

Everglades, Biscayne and Dry Tortugas National Parks and Big Cypress National Preserve represent key core areas of the remaining ecosystem. The South Florida parks are in the vanguard of ecosystem restoration, since restoration is crucial in achieving and maintaining long term resource integrity within the parks. Representatives of the South Florida national parks are active participants in the South Florida Ecosystem Restoration Working Group and its constituent subgroups, and in companion efforts of the State of Florida. The South Florida parks are therefore providing leadership and key input into technical, scientific, and public information aspects of ecosystem restoration.

Given their close geographic proximity and similar natural and cultural resources, the national parks and preserves of South Florida work together to improve efficiencies in their operations.

The superintendents form a board of directors, chaired by Everglades National Park, to address issues, resources, or responsibilities of an overlapping nature, coordinate policy positions on these shared interests and issues, and to review operations at all levels to promote efficiency and reduce costs.

## Coordination Among South Florida's National Parks



A "wet hike" in Big Cypress National Preserve is part of the orientation and training for the park's winter seasonal staff.

### Other Partnerships

Ecosystems do not stop at political boundaries; their mutually shared values and influences are felt in a wider context. Everglades National Park has actively responded to its broader role by active community involvement and fully exploring its ecosystem interests in the South Florida and Caribbean contexts, and through support of Presidential initiatives in Brazil and U.S. Treaty commitments globally.

#### Local Public Schools

For the twenty-eighth year, the park worked with Miami-Dade, Broward, Monroe, and Collier and Lee County Public Schools to provide curriculum-based, on-site programs for 13,147 students. The annual "Envirothon", a scholastic competition in which teams of high school students test their knowledge of the Everglades and environmental issues, was jointly sponsored by the park and the school district.

#### Florida Keys National Marine Sanctuary

Everglades National Park continues to have a close working relationship with the Florida Keys National Marine Sanctuary (FKNMS). There is shared recognition of the mutual influences between park and sanctuary administration, including Florida Bay, associated water quality, the coral reef tract, operations and management. The park is a formal participant in the FKNMS' Water Quality Steering Committee. The FKNMS is an active partner in the ecosystem restoration effort. The two agencies continued their collaboration with the Environmental Protection Agency in the production of "Waterways". This half-hour television show airs widely in the region and explores the natural resources and environmental issues of South Florida.

The NPS and the FKNMS are continuing an inter-agency planning effort to protect sensitive Tortugas habitats. The NPS is

developing a Dry Tortugas National Park General Management Plan amendment and Commercial Services and Visitor Use Plan that will determine ways to enhance resource protection while continuing to provide high quality visitor experiences. The FKNMS'

Tortugas 2000 effort will establish a marine ecological reserve to protect biodiversity and ecosystem integrity. In October and November 1998, the agencies combined their initial scoping efforts to show the difference between the similar, but distinct, plans in a forum that encouraged strong public participation. The draft plans and environmental impact statements are scheduled for release and public review in February/March 2000. Interagency hearings will be held to gather public comments. Completion of the final plans is expected during the summer of 2000.

#### International

Everglades National Park is addressing increasing levels of interest and demand for participation in cooperative professional activities with national park/protected area, tourism, scientific, and regional planning and development interests of other nations. The park's international significance under treaty and multinational agreements, and the unprecedented size, scope, and complexity of Everglades ecosystem restoration, have created global interest in its management issues.

Geographically and culturally, the park's location makes it part of Miami's position as a gateway to Latin America and the Caribbean. Biogeographically, its significance as a subtropical coastal wetland and marine estuary means that its mission encompasses a shared heritage with other nations of the region, in terms of migratory avian and marine species, air and water quality, and impacts of tourism, immigration, and general development and stability of neighboring countries.

Everglades is the only property in the United States that has been formally recognized, under the three major designations, as having international significance. It is a World Heritage Site, a Wetland of International Importance, and a Biosphere Reserve. The park is managed according to U.S. law and jurisdiction, but the nation has voluntarily pledged to protect the site in perpetuity.

These designations are a tremendous source of pride, as well as increased economic benefits from international tourism. The international community has agreed the Everglades are unique and superlative. Their loss would not only be a loss for all Americans, in whose care they are entrusted, but for all people who recognize that they are irreplaceable.



A representative of Everglades National Park travelled to Russia to participate in a World Heritage Site managers' workshop at Lake Baikal.

In 1999, the park provided professional orientation and learning programs to over 350 foreign park representatives, in areas ranging from park management and specific operations interests, to ecosystem planning, restoration, and management. Notable visits included foreign military officers from 47 nations attending training at the U.S. Army War College and the U.S. State Department's Foreign Service Institute Senior Seminar; both groups learning from Everglades' example for potential application to environmental issues in other parts of the world.

In July, a park representative was selected to escort the Deputy Director of Argentina's National Park Service on an orientation visit to the United States.

#### **World Heritage Managers' Council**

In 1996, Everglades National Park hosted an initial meeting of the managers of U.S. World Heritage Sites. As a result, an NPS Council was formalized in order to better coordinate site management issues of common concern and to more effectively provide site management perspectives on the international program aspects of the World Heritage Convention. The Council has met three times and, among other projects, has produced a revised public information brochure on the World Heritage program.

In July, the park was represented at a regional workshop of World Heritage Site managers at Lake Baikal, Russia. The meeting led to formation of a similar managers' council within the Russian Federation.

#### **Bahamas National Trust**

Under the terms of the National Park Service/Bahamas National Trust Memorandum of Agreement, the park represented the Service at two meetings of the Trust Council and cooperated in additional exchange activities:

- Everglades identified three senior consultants (two retired NPS; one retired Parks Canada) who visited the Bahamas in December to develop a guideline and process for management planning at the Bahamas national parks. Following completion of their report, the consultants returned to the Bahamas and presented their recommendations to the Trust Council. Their report was unanimously adopted as a guideline for management planning at the Bahamian national parks.
- Everglades identified a 1974 wildland fire truck as surplus to U.S. Government needs and transferred



the truck to the Trust to assist in providing fire management capability at the Rand Nature Center and the outlying Lucayan National Park.

Fire Management personnel prepare a surplus fire truck for shipment to the Bahamas National Trust.

#### **Brazil**

In October, 1997, the United States and Brazil, under the bilateral agreement "Common Agenda for the Environment", signed a joint declaration designating Everglades National Park and the Brazilian Pantanal National Park as "Partner Parks". The interior wetlands characteristics of both parks provide points of common interest and the opportunity to share techniques and approaches to resource conservation and park management.

Under USAID funding, Everglades and DOI representatives visited Brasilia in August for discussions with the Brazilian Government and Ecotopica to negotiate and outline the terms for a new round of cooperative activities. Based on the jointly prepared work plan, a budget proposal was submitted for a second phase program and is currently under review.

#### **Coral Reef Protection**

On June 11, 1998, the President signed Executive Order 13089 directing federal agencies to take actions to assist in protecting coral reefs, to fully consider the impacts of their actions on coral reefs, to further scientific research, including mapping and monitoring, and to undertake international initiatives for the same purposes. In October 1998, the first meeting of the Coral Reef Task Force established under the Order met at Biscayne National Park. Everglades actively participated and, through its administrative responsibilities for Dry Tortugas National Park, will continue to be active in implementing the terms of the Order. Utilizing existing relationships with the Bahamas National Trust and contacts with World Heritage Site managers, Everglades will also pursue implementation of the Order's provisions with respect to international cooperation.

# 1999 Performance and Results

This section of the annual report summarizes Everglades National Park's accomplishments in Fiscal Year 1999. The park uses the principles of the 1993 Government Performance and Results Act in goal setting, work planning and reporting of results. The park's mission goals describe the desired future conditions that would best fulfill the park purpose. They are broad descriptions expressed in terms of resource condition and visitor experience. Outcome-based, measurable long-term goals provide steps for achieving progress towards the mission goals over a five-year period.

**Mission Goal I. Restoration, Preservation and Protection of Park Resources - Everglades National Park is restored and protected in ways that allow natural processes, functions, cycles, and biota to be reestablished and maintained in perpetuity, and that allow archeological and historical resources to be appropriately preserved.**

- Through 2002, no recorded archaeological sites have deteriorated due to human activities and 75% of sites are in good condition.
- All Everglades NP and South Florida Parks' goals are reflected in the goals and plans of the South Florida Ecosystem Restoration Task Force and the Governor's Commission for a Sustainable South Florida.

**By 2002:**

- 100% of the museum collection is catalogued and meets national standards for storage and protection;
- all formal management decisions incorporate data/analyses from the full range of natural and cultural resources and the social sciences;
- the key causes of ecological decline in Florida Bay are determined and restoration efforts begun;
- 1000 acres of the Hole-in-the Donut lands are restored;
- 90% of melaleuca in East Everglades and 80% of localized exotic plants are eliminated;
- the numbers of Cape Sable Seaside Sparrows show an increasing trend, the panther population is not decreasing in numbers from the 1997 level, manatee populations remain stable, crocodile populations continue to increase or remain stable, osprey populations are stable, and eagle populations are increasing;
- the key causes of key wildlife populations declines are determined and corrective actions are identified.

**Mission Goal II. Hydrological Restoration - Hydrological conditions within Everglades National Park and the South Florida ecosystem are characteristic of the natural ecosystem prior to Euro-American intervention, including water quality, quantity, distribution and timing.**

**By 2002:**

- 100% of pre-construction work is completed to begin redistribution of water deliveries from the C-111 basin to match pre-drainage volume/timing;
- develop Outstanding Florida Water and Outstanding Natural Resource Waters water quality standards for all other parameters;
- 100% of pre-construction work is completed to begin redistribution of water deliveries into Northeast Shark Slough and inflows match pre-drainage volumes/timing.



Barbara Johnson supervises fee collection operations at the park's main entrance station

**Mission Goal III. The Visitor Experience - Visitors to Everglades National Park have the opportunity to experience the park's unique subtropical wilderness values.**

**By 2002:**

- 80% of park visitors are satisfied with appropriate park facilities, services, and recreational opportunities;
- 20% of facilities identified as needing structural repairs or not meeting code are made safe, sound and sanitary;
- 80% of park visitors are satisfied with opportunities to experience wilderness;
- all concession employees and Incidental Business Permit (IBP) holders who provide interpretive services will meet performance standards established by the park;
- 80% of park visitors are satisfied with the range and quality of concession services;
- incidents of visitor injury accidents will decrease by 10%;
- 60% of school children who attend park sponsored interpretive and educational programs will demonstrate knowledge of park resources and issues;
- 15% of employee housing classified as being in poor or fair condition in 1997, has been removed, replaced, or upgraded to good condition.



American crocodile sunning on the Flamingo boat ramp.

**Mission Goal IV. Tribal Relations - The Seminole and Miccosukee Tribes have the opportunity to exercise their existing tribal rights within Everglades National Park to the extent and in such manner that they do not conflict with the park purpose.**

**By 2002:**

- issues of mutual interest between the park and the Seminole and Miccosukee Tribes are resolved through cooperative and coordinated working relationships.

**Mission Goal V. Public Understanding and Support - The public understands and appreciates Everglades National Park and its role in the South Florida ecosystem and provides support in achieving the park purpose.**

**By 2002:**

- 60% of visitors stopping at public contact areas will understand and appreciate the park's significance and its role in the ecosystem;
- 60% of park visitors will have access to park and ecosystem information in their native languages and each Interpretive District will have at least one person on staff who can communicate orally and in writing in Spanish, French or German;
- 60% of park visitors will have access to information about the human history and American Tribal cultures of the Everglades;
- all key decisions affecting sustainability of the South Florida Parks and the ecosystem are favorable as a result of public support of park goals.

**Mission Goal VI. Human Resources - Everglades National Park has a diverse, motivated, and professional workforce allowing it to be a responsive, efficient, safe, and accountable organization.**

- By 1999, all computer users will have compatible software and hardware in support of NPS standards and are trained in the NPS standard programs.
- Through 2002, 100% of employees' performance plans are linked to appropriate strategic and annual performance goals.

**By 2002:**

- 100% of permanent and term employees have essential competencies needs identified;
- the park's annual new hires reflect the overall diversity of the civilian labor force;
- reduce by 50% from the 1996 levels, the number and severity of lost time employee injuries.

# Restoration, Preservation and Protection of Natural and Cultural Resources

**Long Term Goal:** Through 2002, no recorded archaeological sites have deteriorated due to human activities and 75% of sites are in good condition.

### Accomplishments

- 3 permanent employees completed Archeological Resources Protection Act training.
- Gulf Coast personnel monitored 14 sites as a function of ongoing patrol operations.
- Tamiami personnel monitored and protected 80 sites, and recorded no additional degradation due to human activity.
- Tamiami personnel initiated a program to protect sites from feral pigs.
- 2 cultural sites in the East Everglades District were acquired by NPS, posted and are being monitored.
- East Everglades rangers conducted a joint ARPA investigation with the State of Florida.
- The Flamingo District developed a Cultural Resource Monitoring Plan for 1999; 6 of 19 identified sites in the district were monitored to ensure no degradation during 1999.

**Long Term Goal:** By 2002, 100% of the museum collection is catalogued and meets national standards for storage and protection.

### Accomplishments

- Completed cataloguing of 2,000 museum objects; backlog of uncataloged objects is nearly eliminated.
- Completed Collection Management Reports for four south Florida national park areas.
- Reviewed proposal for Cold War sites for NPS Southeast Regional Office.

**Long Term Goal:** All Everglades NP and South Florida Parks' goals are reflected in the goals and plans of the South Florida Ecosystem Restoration Task Force/Working Group and the Governor's Commission for a Sustainable South Florida.

**Task Force/Working Group and Governor's Commission Coordination:** The NPS maintained a leadership role in programs and planning for ecosystem restoration and public education about the ecosystem effort. The Superintendent served as NPS representative on the South Florida Ecosystem Restoration Working Group, reporting to the Task Force (SFERTF) and served as the Department of the Interior (DOI) representative on the Governor's Commission for a Sustainable South Florida (GCSSF).

The NPS participated in providing recommendations on the Draft Implementation Plan of the Central and Southern Florida Project Comprehensive Review Study (C & SF Restudy) to the Governor, Secretary of the Army, SFERTF, and the SFWMD Governing Board.

South Florida Natural Resources Center staff served on the Natural System Team of the Southern Everglades Restoration Alliance (SERA). Staff participated in the development, review, and application of performance measures to evaluate ecological impacts of water management scenarios. In cooperation with the U. S. Fish and Wildlife Service (FWS), staff advanced performance measures appropriate for the evaluation of impacts to five listed species. SERA was terminated May 1999.

**C & SF Restudy:** The Restudy Implementation Plan was drafted, and submitted, on time with NPS input. NPS concerns about the restudy implementation plan were defined and addressed under Implementation Modeling for the Restudy to improve its short-term performance. NPS evaluations were supported by the Across Trophic Level System Simulation (ATLSS) Models.

**Resource Evaluation, Assessment, and Research for Restoration Planning:** Critical Ecosystem Studies Initiative (CESI) funding supported crayfish, aquatic insect, zooplankton and fish studies in drier areas of the Rocky Glades. A number of new species have been described, along with species new to the park. The development of adequate baseline data on freshwater fish and invertebrates will enable monitoring of park

Wallet belonging to Audubon warden Guy Bradley, who was killed in 1905 protecting a rookery from plume hunters. The wallet is now part of the park's museum collection.





areas most affected by hydrological changes. The park's gamefish harvest monitoring program, with data from 1958 to present, measured fish abundance and assessed recreational sport fisheries in park waters.

**General Management Planning:** The Dry Tortugas National Park Commercial Services and Visitor Use Plan will determine ways to enhance resource protection while continuing to provide high quality visitor experiences. Tortugas 2000, a component of the Florida Keys National Marine Sanctuary marine zoning strategy, will establish an ecological reserve in adjoining waters. The agencies combined their initial scoping efforts to show the difference between the similar, but distinct, plans in a forum that encouraged strong public participation.

**Adjacent Land Use:** The park has an evolving program to track, review, and prepare comments on development proposals and permits with the potential to affect park resources and the visitor experience. The NPS participated as a cooperating agency in the preparation of a Supplemental Environmental Impact Statement (SEIS) for the transfer of Homestead Air Force Base. A draft was issued in February 1999 and the final document is expected in the spring of 2000.

**Social Science Coordination:** The park participated in the development of an action plan for SFERTF/WG and GCSSF member agencies for social science research and its application into land management and ecosystem restoration project planning, implementation, and monitoring.

#### Accomplishments

##### Task Force/Working Group and Governor's Commission Coordination

- Participated in monthly meetings of SFERTF and GCSSF and other related meetings regarding ecosystem restoration to present NPS views and positions and assure they are considered in each meeting.
- Coordinated NPS views and positions with superintendents of Big Cypress NPr and Biscayne NP and their staff to assure that the NPS speaks with "one voice". Briefed superintendents monthly on upcoming ecosystem meetings, issues, and topics.
- Presented NPS positions and priorities for incorporation into the goals, plans and projects of the Task Force, Working Group and Governor's

Commission including the Task Force's 1999 Integrated Financial Plan, FY 2000 Cross-Cut Budget, 1999 Biennial Report to Congress and the Governor's Commission's recommendations on the Draft Implementation Plan of the C & SF Project Restudy.

- Participated in numerous briefings and hosted visits by Congressional and Administration members to educate them on the ecosystem restoration projects and needs.
- Completed monthly meeting summaries for distribution to NPS staff, DOI land managers, and legislative staffers.
- Participated with USGS/BRD in the development and testing of an alligator nesting index model, to be used in water management alternative evaluations.

##### Restudy

- Participated on the Restudy Alternative Evaluation Team. Negotiated issues addressing NPS concerns with performance of the proposed draft plan.
- Participated in meetings to support park comments on the Restudy.
- Participated in efforts to define and schedule the Restudy Implementation Plan.
- Completed report, "Florida Bay/Ten Thousands Islands" (marine/estuarine fisheries data preparation/analysis), for the Central & Southern Florida Comprehensive Review Study- (PEIS).
- Completed draft (C&SF) Performance Measures on Florida Bay Snook/Spotted Seatrout CPUE/ Salinity/Water levels.

##### Resource Evaluation, Assessment, and Research for Restoration Planning

- Resampled 100% of 5 long-term (established in 1979) vegetation monitoring transects to measure shifts in vegetation response to hydrologic conditions in northern Taylor Slough. Preliminary data shows little change in vegetation composition and dominance since 1997 resampling; sawgrass dominated reflecting near constant hydrologic conditions in this part of the slough.
- Resampled 100% of 100 permanently marked solution holes in the Rocky Glades for the fourth time since the study began in 1995. Changes in solution hole flora ranged from no change to significant change; the factors responsible for shifts in species composition and/or dominance are not fully known.

- Completed manuscript, “Vegetation patterns and processes in tree islands of the southern Everglades and adjacent areas”, for inclusion in forthcoming book on tree islands.
- Completed Florida Bay Fisheries 1998 Status Report.
- Initiated field data collection methodology for live bait vs. artificial bait
- Wrote 3 cooperative/interagency agreements for gamefish recovery in Florida Bay and adjacent waters using park’s long-term fishery data sets.
- Published technical report: “An Examination of the Modified Water Deliveries Projects, the C-111 Project, and the Experimental Water Deliveries Project: Hydrologic Analysis and Effects on Endangered Species”.
- Produced technical analysis of the Central and South Florida Comprehensive Review Study.
- Worked cooperatively with Corps of Engineers, SFWMD, and other agencies to improve the NPS-sponsored Modified Water Deliveries Project.
- Produced technical products relating to Cape Sable Seaside Sparrow recovery, including an assessment of historical data in ENP Expansion Area, an assessment of alternative operating plans, and interagency coordination on Experimental Water Deliveries Program modifications.

### Adjacent Land Use

- Provided comments on two drafts of the Homestead AFB SEIS document.
- Provided comments, with FWS, for DOI response on draft Programmatic Environmental Impact Statement for the “Lake Belt Plan”, a comprehensive mining plan under which 404 permits would be issued by the U.S. Army Corps of Engineers.

### Social Science Coordination

- SFERWG Science Coordination Team reviewed draft “South Florida Action Plan for Applied Behavioral Sciences”.
- Summarized the economic contributions of the park to the local economy through application of the “Money Generation Model”.

**Long Term Goal: By 2002, all formal management decisions incorporate data/analyses from the full range of natural and cultural resources and the social sciences.**

The park is developing a strategic planning process to ensure that all formal management decisions are comprehensive, productive and all-inclusive.

Scientific databases have been developed to provide easy access to information for present analysis and protection for future use. A GIS database allows for map production, statistical reporting, spatial analysis and data modeling that supports research efforts associated with Everglades ecosystem restoration and other environmental studies. The ORACLE database gives scientists the ability to determine the effects environmental parameters have on organisms.

The interagency Florida Bay Program Management Committee (PMC) was formed in 1993 to coordinate a broad range of scientific activities planned for Florida Bay by federal and state agencies. It is co-chaired by representatives from Everglades National Park and the Florida Fish and Wildlife Conservation Commission. The Florida Bay Interagency Science Center, in Key Largo, is one of the park’s continuing contributions to the interagency Florida Bay Science Program. Research vessels, laboratories and a dorm are available for use by scientists holding Everglades National Park research permits.

The Department of the Interior’s Critical Ecosystem Studies Initiative supports and funds scientific programs considered essential to the overall ecosystem restoration program.

### Accomplishments:

- Developed performance management handbook and training curriculum for all park employees.
- Revised park long term goals and the development of annual goals for the FY 2000 annual performance plan.
- Participated in revision of Servicewide goals for the NPS FY 2000 Strategic Plan.
- Formed Wilderness Project Team, chaired by the Flamingo District Ranger, to review wilderness policy and issues.
- Developed GIS products, including:
  - analyses and programming for the Florida Bay FATHOM model.

-output of SFWMD Restudy data; programs for analysis/evaluation of various model outputs.

-datasets for fire management models.

-analysis/mapping for Homestead Air Reserve Station Noise Study.

- ORACLE database is in operation; databases on marine benthic ecology, freshwater fish, creel census data in various stages of development and use.
- Florida Bay PMC was represented at the South Florida Restoration Forum.
- Completed field data collection and produced technical report describing trends in vegetation patterns in Taylor Slough, 1992-1998.
- Completed transect establishment and issued progress report for Shark Slough vegetation study.
- Discovered and described new groundwater invertebrates species from Rocky Glades; drafted or completed technical publications for journal publication.
- Developed methods for sampling aquatic animals of seasonally wet marsh habitats and are now being tested.
- Derived new insights into the population ecology of crayfish in seasonally wet solution-hole habitats from new methods for quantifying dispersal; results submitted for journal publication.
- Established a permanent plot system and initial plant inventory database on endangered pineland plant communities.
- Successfully reintroduced two species of birds, as experimental populations, that had been extirpated from ENP in the past half century.



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Endangered Florida panthers are closely monitored, but are rarely seen in the park.

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**Long Term Goal: By 2002, the key causes of ecological decline in Florida Bay are determined and restoration efforts begun.**

#### **Accomplishments**

- Organized the 1999 Florida Bay and Adjacent Marine Systems Science Conference held November 1-5, 1999.
- Entered into cooperative agreements with:
  - Florida Marine Research Institute to ascertain the importance of disease in seagrass die-off;
  - University of Virginia to model seagrass distribution and processes throughout Florida Bay.
- Produced the Florida Bay Interagency Science Center Annual Report, summarizing facility use by interagency and cooperator scientists.
- Served as member of the Florida Keys Stormwater Technical Advisory Committee.
- Monitored and maintained 35 active marine stations that record and transmit tide, salinity and rain data.
- Monitored and maintained 87 marsh stations that record and transmit stage and rain data.
- Completed annual data report for the Marine Monitoring Network.

## Everglades National Park

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**Long Term Goal: By 2002, 1000 acres of the Hole-in-the Donut lands are restored.**

A major project to remove *Schinus terebinthifolius* (Brazilian pepper) from 6,250 acres of formerly farmed wetlands and forested uplands in the Hole-in-the-Donut (HID) has been underway since 1996. Funding for the project comes from the Miami-Dade County Freshwater Wetland Mitigation Trust Fund to support direct wetland restoration and a research and monitoring program. A contract for the fourth year of the restoration project was issued in 1998. Based on a completed Environmental Assessment and signed Finding of No Significant Impact, the disposal of disturbed substrate and plant material will be carried out in phases. During the first phase, disturbed substrate will be placed in borrow pits (unnatural deep-water habitats) restoring the pits to long hydroperiod wetlands. Organic material will be hauled off-site for disposal.

### Accomplishments

- 135 acres of disturbed substrate and *Schinus* were removed, bringing the total restored area to 640 acres or 10.2 % of the HID area.

**Long Term Goal: By 2002, 90% of melaleuca in East Everglades and 80% of localized exotic plants are eliminated.**

The park maintains an active, ongoing program of exotic plant removal or treatment. However, exotic plant control was delayed in FY 99 due to the vacant project manager position. A new Integrated Pest Manager was hired in August 1999. Park rangers provided planning, logistical support and field supervision to crews engaged in projects to eliminate localized exotic plants in the Tamiami, East Everglades, Flamingo and Florida Bay districts.

### Accomplishments

- Developed Flamingo Exotic Plant Management Plan for 1999; park rangers treated 590 plants.
- Volunteers contributed 2,880 hours for exotic plant eradication efforts.
- Conducted district-wide survey of *Casuarina* (Australian pine) infestation on Florida Bay islands and shoreline.
- Removed artificial berm, impounding water around the boardwalk, at Chekika. Cattails choking the area were killed, and the berm "footprint" was replanted with sawgrass. Florida Dept. of Transportation contributed project funding.

**Long Term Goal: By 2002, the numbers of Cape Sable Seaside Sparrows show an increasing trend, the panther population is not decreasing in numbers from the 1997 level, manatee populations remain stable, crocodile populations continue to increase or remain stable, osprey populations are stable, and eagle populations are increasing.**

Cape Sable Seaside Sparrow: Emergency measures, coupled with dry weather conditions, between January and April provided the sparrow a reasonable breeding season. Park staff participated in a Cape Sable Seaside Sparrow Interim Measures Team.

West Indian Manatee: The park participated in three interagency, synoptic, aerial surveys of the West Indian manatee during the winter of 1998-99. Observers counted the second highest number of manatees ever - 2,353 statewide. The park has also been a participant in a multi-agency program to monitor and evaluate captive manatees reintroduced into the wilds of South Florida. In March 1999, two rehabilitated manatees were released in the park through a cooperative project with



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In FY 99, 135 acres of former agricultural land in the Hole-in-the-Donut was restored to wetland.

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Florida Department of Environmental Protection and Sea World.

Wildlife monitoring field activities were facilitated through coordination by Visitor and Resource Protection and South Florida Natural Resources Center personnel. Park rangers enforced posted speed limits on roads and no-wake zones on waterways to protect species populations from injury and mortality caused by visitor activities. Because of staff shortages, turtle monitoring in the Gulf Coast District was undertaken by the U.S. Fish and Wildlife Service (FWS).

The park has a well-established fire management program and effectively conducts Wildland Fires for Resource Use Benefit and Prescribed Burns to protect populations of threatened or endangered species and to enhance/restore habitat.

#### Accomplishments

- Issued 125 research permits.
- Eliminated backlog in research permit applications.
- Provided comment on and technical assistance in preparation of the FWS Cape Sable seaside sparrow (CSSS) biological opinion, proposed emergency operations, and related documents.
- Participated in the peer review of the NPS-sponsored CSSS research study.
- Conducted annual breeding survey of the CSSS in Everglades National Park and Big Cypress National Preserve.
- Produced the CSSS 1999 breeding season report.
- Produced a paper on the risk assessment of the CSSS.
- Coordinated and staffed the installation of inflatable plugs in culverts to restrict surface water flow into critical CSSS breeding areas.
- Conducted prescribed burns on 23,000 acres; approximately 12,000 acres enhanced CSSS habitat or reduced hazard fuel buildups from areas adjacent to sparrow habitat.
- Examined, in cooperation with the FWS, six Modified Water Delivery alternatives and effects on five listed species.
- Investigated 16 wildlife violations in the East Everglades District, one resulted in a \$2,500 fine and forfeiture of weapon for unlawful taking of wildlife.
- Florida Bay rangers issued 14 violation notices and 130 warnings for trespass into closed or restricted wildlife protection areas.

- Established a Wildlife Monitoring Plan in the Flamingo District; rangers and volunteers spent 230 hours tracking manatees and assisted with necropsies of two manatees that had been hit by vessels.
- Continued regular monitoring of radio-collared Florida panther.
- Conducted annual nesting survey of bald eagle and osprey in the park. Summarized nesting data in annual report.
- Produced the following wildlife reports:
  - “Florida Panther Population and Habitat Viability Assessment and Genetics” report.
  - quarterly progress reports on the genetic restoration of the Florida Panther in the park.

**Long Term Goal: By 2002: the key causes of key wildlife populations declines are determined and corrective actions are identified.**

#### Accomplishments

- Examined, in cooperation with the FWS, six Modified Water Delivery alternatives and effects on wildlife habitat.
- Flamingo rangers spent 2,184 hours on speed and no-wake enforcement for wildlife protection.
- Conducted monitoring surveys for wading bird, alligator and white-tailed deer via systematic reconnaissance flights.
- Conducted surveys of nesting effort of wading birds in the Everglades and Florida Bay.
- Developed new techniques for inventorying the fish and crayfish food base in short hydroperiod prairies.
- Produced the following wildlife reports:
  - final report on the “Systematic Reconnaissance Flight Wading Bird Survey in Everglades National Park, 1985-1998”.
  - progress report on “Statistical Analysis of American Alligator Nesting Data In Everglades National Park In Relation To Geographic, Hydrologic and Temporal Variation”.
  - progress report on “Modeling Spatial and Temporal Dynamics of White-tailed Deer in the Florida Everglades”.
- Produced 5 reports on fish and wildlife population trends.

### Hydrological Restoration

The 1989 Everglades National Park Expansion Act added 109,503 acres of the critical eastern half of Shark River Slough to the park. The Act directed the Corps of Engineers to modify water management structures to allow the sheetflow of water and extend the hydroperiod to more closely resemble the historic Everglades. Restored water flow will bring immediate benefits to park plant and animal life and may be critical to the survival of the endangered wood stork and Cape Sable Seaside Sparrow.

The Modified Water Deliveries Project involves construction of alterations to the water management system at the park's northern boundary that could operate to bring immediate benefits to hydrological restoration of the Shark River Slough. By removing some existing structures and installing new features, the project will recreate a single functioning hydrologic system in four areas within and north of the expanded park boundaries that are currently separated.

Major water diversion structures for restoration of flows and levels are at, or near completion. State water quality permits are required for their operation, as well as completion of land acquisitions in affected areas. In addition to park lands, adjoining private lands in the 8½

Square Mile Area would be affected. Operation of the new water system cannot begin until land acquisitions within the expansion area are completed. As of November 30, the federal government has acquired 79,956 acres, 29,547 remain to be acquired. Acquisition of the remaining land is proceeding at an accelerated rate and is projected to be completed by November 2000. In FY 99, \$20 million was allocated for East Everglades land acquisition; Congress has appropriated \$20 million for FY 2000.

Critical issues surrounding survival of the Cape Sable Seaside Sparrow continue to heighten awareness of the need to complete the project and begin revised operations.

Park managers and scientists represented National Park Service interests in the Central & Southern Florida Restudy process and on the South Florida Ecosystem Restoration Working Group's Science Coordination Team. Everglades National Park scientists were fully involved in the hydrological and biological evaluation of Restudy alternatives, definition of performance measures, and input on the Restudy Implementation Plan.

**Long Term Goal: By 2002, 100% of pre-construction work is completed to begin redistribution of water deliveries from the C-111 basin to match pre-drainage volume/timing.**

In May 1999, the U.S. Army Corps of Engineers began construction of two new bridges on the park's main road at Taylor Slough. This project, scheduled to take 18 months, is part of a program to restore historical water flows through Taylor Slough and into Florida Bay.

The park was involved in the third year of Test 7 of the Experimental Water Delivery Program.

#### Accomplishments

- Staff served as Government Technical Representatives on cooperative agreements related to the Experimental Water Delivery Program, ensured their adequacy, and integrated them with in-house monitoring programs.
- Monitored biological effects of 332D pump tests.



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Hydrological Technician  
Jennifer Mohammed  
checking water conductivity  
and temperature at  
Lostman's River hydro-  
monitoring station.

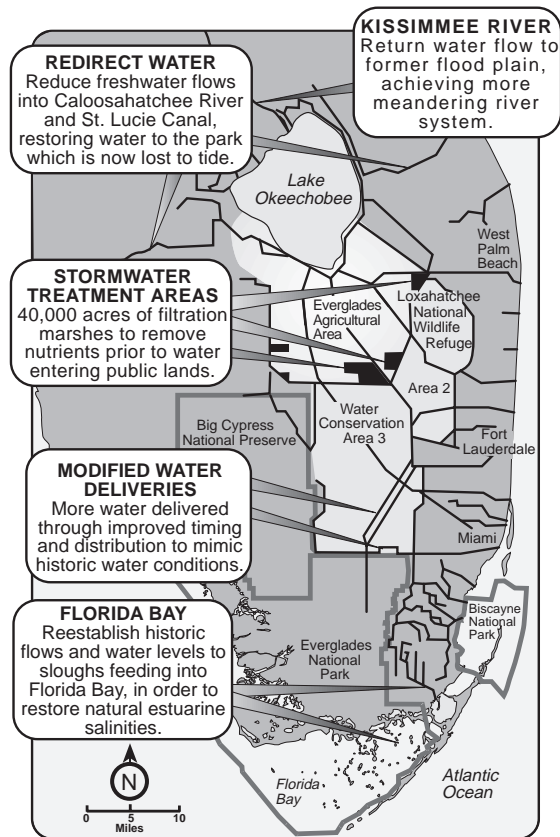
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**Long Term Goal: By 2002, develop Outstanding Florida Water and Outstanding Natural Resource Waters water quality standards for all other parameters.**

Pollutants from external sources have degraded the water quality in Everglades National Park. Research, monitoring, and evaluation activities are ongoing to determine where the park is in terms of water quality restoration. The Water Quality Program for FY 1999 reviewed and analyzed water quality data from 1998 to determine trends in association with present and future restoration activities.

**Accomplishments**

- Produced quarterly reports on the status of phosphorus entering the park in relation to the Consent Decree.
- Produced "Phosphorus Loads to the Everglades Protection Area" report in response to Department of Justice request.
- Managed the technical program for the FIU Dosing Study, FIU Transect Study, Seminole Indian Reservation Water Quality Study, EPA/FIU Everglades Mercury Study, and the UF/IFAS BMP Study.
- Coordinated distribution of results from the FIU Dosing Study and other DOI funded projects to scientists and other interested parties.
- Participated in Everglades Advanced Technologies Initiative Team (EATIT) meetings.
- Produced a series of reports on Stormwater Treatment Areas, Phase II research, and EATIT for park managers and scientists.



**Long Term Goal: By 2002, 100% of pre-construction work is completed to begin redistribution of water deliveries into Northeast Shark Slough and inflows match pre-drainage volumes/timing.**

Land acquisition in the park's East Everglades addition is a key component of ecosystem restoration plans. Restoration of water distribution, timing, and quality needed to approximate natural system models cannot be accomplished until lands are acquired. The park manages a program, in coordination with the Department of the Interior, NPS Washington Office and Naples Lands Office, Department of Justice and state agencies, to secure appropriated funds, necessary authorities and actions to acquire all lands in the East Everglades addition.

**Accomplishments**

- 6,848.83 acres, representing 966 tracts, were acquired in the East Everglades Expansion Area in FY 99.
- 639.42 acres, representing 178 tracts, were submitted for declaration of taking/condemnation.

### The Visitor Experience

To assist the National Park Service in complying with the Government Performance and Results Act, a visitor survey was conducted in Everglades National Park in March 1999. The survey results indicated that **91%** of park visitors were satisfied with park facilities, services, and recreational opportunities.

**Long Term Goal: By 2002, 80% of park visitors are satisfied with park facilities.**

#### Accomplishments:

- Secured \$63,000 from the Federal Lands Highway Program and awarded a contract to improve parking for accessibility; work will be completed in FY 2000.
- Design work associated with the installation of an elevator to improve accessibility at the Flamingo Visitor Center was initiated. A contract for the construction should be awarded in FY 2000.

**Long Term Goal: By 2002, 20% of facilities identified as needing structural repairs or not meeting code are made safe, sound and sanitary.**

Maintained utilities throughout the year. Numerous electric surges and dips caused damage to park equipment. Voltage problems were identified at facilities from Headquarters to Flamingo. Florida Power and Light performed repairs.

All water systems and wastewater systems were maintained in compliance with State and Federal regulations. Park staff provided all of the technical support for proper management of the systems. This included remaining current on policy and regulatory changes, drafting permitting documents, coordinating planning for new systems, resolving daily operational issues, and reporting emergencies and non-compliant activities. Testing requirements for both services have continued to increase, impacting supply/material budgets and work load. Rehabilitation of the Flamingo Waste Water Treatment Plant was initiated, under

contract, during the year. Numerous elements to replace heavily corroded portions of the plant were fabricated and installed. The transfer to hypochlorination was completed and evaluated, but found to be too expensive and labor intensive. A switch back to chlorine gas will occur during FY 2000.

Construction activities led to numerous power disruptions and waterline breaks in the Flamingo area. Improvements to security systems were made with the installation and servicing of alarm systems, facilitating 24 hour a day, year round fire and security monitoring by park Communications Center personnel.

Improved procurement and preventive maintenance helped to keep costs in line for the park's aging motor vehicle fleet. Costly breakdowns continued to occur, but reliability improved.

#### Accomplishments:

- Completed a GIS mowing plan for the Pine Island district and a non-digitized plan for the Gulf Coast/Northwest District.
- Maintained all visitor/administrative areas, with some deferred maintenance in the areas of pruning, edging, weed removal, exotics control, stump removal, and roadside clearing.
- Completed installation of new signs at headquarters, main park road, and Flamingo.
- Purchased automated fuel dispensing equipment; contracted for installation.
- Secured HazMat funding to expand fuel storage and improve facility quality at Florida Bay and Chekika.
- Secured a grant to provide offset funding for alternative fuel (biodiesel) for operation of grounds equipment; to be implemented in FY 2000.
- Implemented safety and environmental improvements at autoshop; vehicle wash facility placed in service.
- Provided technical review and input for the Taylor Slough Bridge Project.
- Completed design work for rehabilitation of Flamingo restrooms; began design work for the Royal Palm and West Lake restrooms.
- Conducted 42 hours structural fire training for 28 employees to maintain response capability.



Replacement of the roof at Flamingo Lodge was completed during FY 99.



#### East Everglades District

- Installed 2 bulletin boards; began development of exhibits to provide non-personal interpretation.
- Continued rehabilitation of Chekika contact station, including completion of interior walls and installation of new windows.
- Installed new directional signs to Chekika through cooperation with Florida Dept. of Transportation.
- Staffed Chekika entrance station 11 out of 12 months.

#### Flamingo District:

- Completed contracted replacement of Flamingo Lodge roofs.
- Rehabilitated exterior lighting in the visitor parking area through a contract with Florida Power and Light.
- Completed survey work and awarded contract for replacement of West Lake boardwalk.
- Pruned trees throughout the district, including removal of hazardous trees in visitor parking areas, campgrounds, housing, roadsides and around buildings, significantly improving visual appearance.
- Rehabilitated backcountry chickees (campsites) at Oyster Bay and Shark River; reopened sites to visitor use.

#### Florida Bay District

- Completed concrete dock repairs.
- Site plan developed and approved; final completion document due from Denver Service Center.

#### Pine Island District

- Removed temporary main visitor center from the park following surplus property sale.
- Completed construction of dry lab at Daniel Beard Center.



Park Rangers Bill Raften and Tony Terry confiscate sponges illegally collected by commercial spongers in the Flamingo District.

#### Shark Valley/Tamiami District

- Completed planned restroom work at the Loop Road Environmental Education Center.
- Completed survey work and awarded contract for replacement of Bobcat Nature Trail boardwalk.

**Long Term Goal: By 2002, 80% of park visitors are satisfied with opportunity to experience wilderness.**

The National Park Service continues to participate as a cooperating agency in the preparation of a Supplemental Environmental Impact Statement (SEIS) for redevelopment of the former Homestead Air Force Base. Due to an underestimation of the time needed for acoustic studies, the SEIS Supplemental Environmental Impact Statement was not released in June 1999, as originally scheduled.

The Park Management Team decided to incorporate a Soundscape Management Plan into the update of the General Management Plan.

Computerization of the park's wilderness permit system enables staff to better assign and track backcountry campsite permits.

#### Accomplishments

- Finalized Vista Management Plan for State of Florida approval in FY 2000.
- Implemented computerized wilderness permit system.
- Revised and printed Wilderness Trip Planner
- Issued 2,162 backcountry camping permits for park wilderness areas; overnight stays totaled 5,946.
- 1 Visitor and Resource Protection ranger completed 100-hour Advanced Resource Protection Skills training.



Maintenance Worker Luther Cochran prepares to take a work barge out to maintain backcountry chickee facilities.

- Suppressed fires through 8 weeks of "severe" fire danger conditions, including

Maintenance Workers Luther Cochran and Ken Smith work on the rehabilitation of a backcountry chickee.



active suppression of a 1,500 acre fire to keep it out of critical Cape Sable Seaside Sparrow habitat.

- Received \$300,000 from the NPS National Fire Office to stage initial attack resources during the fire severity emergency, as a result of pre-planning and analysis by park Fire Management Officer.
- Provided logistical support to NPS contractors researching the natural ambient soundscape of the park.
- Provided comments on RM 47 to the NPS Wilderness Coordinator.
- Wrote sections of Noise and NPS: South Florida in the National Context.
- Helped facilitate Biscayne NP Soundscape Management Plan.

#### East Everglades District

- Completed removal of berm at Chekika; planted 3,500 sawgrass plugs in restored area.
- Recovered 8 motor vehicles from park water areas (canals, borrow pits) with assistance from Miami-Dade County Police Dept. Dive Unit.
- Investigated 31 dumping incidents (21 in conjunction with other agencies) resulting in 2 significant court cases involving insurance fraud for dumping vehicles and \$ 1,000 restitution to the park.
- Assisted Miami-Dade County Department of Environmental Resources Management (DERM) with hazardous waste dumping case that resulted in a \$1,000 fine and probation.

#### Flamingo District

- Volunteers contributed 144 hours to complete a beach cleanup of Cape Sable.
- Investigated 2 major sponging cases that resulted in the confiscation of over 3,000 sponges.

- Rangers spent 4,992 hours monitoring backcountry areas and providing wilderness education to visitors.
- Investigated 6 groundings.
- Replaced 14 boundary signs, which included 50 volunteer hours preparing signs and monitoring contractor.

#### Florida Bay District

- Rangers spent over 1,200 hours on the water to monitor designated submerged wilderness.
- Issued 57 violation notices and 98 warnings for disturbance of natural features.
- Investigated 99 vessel groundings, with preliminary environmental damage assessments conducted for each grounding incident.

#### Gulf Coast/Northwest District

- Completed rehabilitation of 3 backcountry campsites.
- Conducted fire operations to reduce fire fuels at 4 wilderness sites.

#### Tamiami/Shark Valley

- Inspected/replaced/marked 25 miles of airboat trails to facilitate day and night navigation by patrol personnel, researchers and cooperators.
- Inspected/replaced 40 miles of boundary signs abutting areas where hunting and motorized vehicles/vessels are permitted.

**Long Term Goal: By 2002, all concession employees and Incidental Business Permit (IBP) holders who provide interpretive services will meet performance standards established by the park.**

There was no progress on the development of interpretive programming standards for presentations within Everglades NP to address core themes, interpretive competencies, safety, diversity, and various physical abilities. Increased visitation in the Gulf Coast/Northwest District and staff shortages prevented the District Interpreter from working on the project.

**Long Term Goal: By 2002, 80% of park visitors are satisfied with the range and quality of concession services.**

The National Park Service contracts with three private concessioners to provide a variety of visitor services, including:

**Everglades National Park Boat Tours** at Everglades City - visitors may enjoy boat tours, canoe rentals and browsing the gift shop.

**Flamingo Lodge, Marina and Outpost Resort** - provides overnight lodging, food service, a marina, boat tours, boat, canoe or bicycle rentals and gift shop.

**Shark Valley Tram Tours** - offers an open-air tram tour through Everglades prairie, bicycle rentals, souvenirs and convenience items.

In addition, the park manages over 335 active Incidental Business Permits for guided recreational fishing, bus tours, canoe/kayak outfitters, charter boat trips, and birdwatching trips.

#### **Accomplishments**

- Completed two periodic evaluations of each concession, ensuring contract compliance.
- Extended contract for AMFAC/Flamingo Lodge operation until December 31, 2001.
- Extended contract for Everglades National Park Boat Tours until December 31, 2000.

**Long Term Goal: By 2002, incidents of visitor injury accidents will decrease by 10%.**

Visitor and Resource Protection Division personnel regularly conducted vehicle and boat patrols to ensure the protection and safety of park visitors.

The park Safety Officer reviewed visitor accident reports to determine trends, conducted inspections of visitor use areas and served as an active member of the NPS Southeast Region Safety Program. In this capacity, he attended regional meetings, assisted in implementation of the SMIS program, participated in safety inspections at other parks in the region and made a presentation on safety at the regional joint Chief Ranger/Chief of Interpretation conference in Miami.

#### **Accomplishments**

##### **Visitor Protection Activities**

- Completed 5 year revision of collateral schedule for CFR violations in the South Florida Parks for submission to the U.S. District Court.
- Installed security cameras to prevent thefts from vehicles in the Coe Visitor Center parking lot.
- Significant incidents involving East Everglades rangers included 1 homicide, 16 alcohol/drug, 63 traffic/motor vehicle and 17 weapons violations.
- Responded to 176 incidents in the Flamingo District, ranging from minor visitor assists to major felony.
- Conducted 3,000 hours of high profile patrols in the Tamiami District to ensure visitor protection and safety.
- Conducted over 1,300 boating safety inspections, with 76 violation notices and 429 warnings being issued for boating safety violations in the Florida Bay District.

##### **Park Safety Officer**

- Inspected all concession areas.
- Inspected, with other park staff, visitor facilities and closed or modified certain areas including portions of the Mahogany Hammock boardwalk and the Anhinga Trail.
- Participated in "cross connection survey" for park and concession facilities.
- Investigated all reports of facility hazards that posed a threat to visitor safety; corrections made as needed.
- Reviewed visitor accidents reports.



Park Ranger Kent Looney patrols park waters in the Flamingo District.

Park Ranger Sandy Dayhoff leads teachers in a workshop activity illustrating how water flows through the Everglades.



**Long Term Goal: By 2002, 60% of school children who attend park sponsored interpretive and educational programs will demonstrate knowledge of park resources and issues.**

The Environmental Education program, now in its 28th year, is well-respected at the local level and has been a model for programs throughout the NPS. Curriculum-based education programs are the park's primary, long-term outreach tools. All education materials are reviewed on a cyclic basis to assure that current curriculum standards are met.

### Accomplishments

- Conducted 160 on-site day trips and 34 overnight camps for 13,147 participants from Dade, Broward, Monroe, Collier and Lee counties.
- Presented 7 school programs for Miccosukee students.
- Presented 10 parent night programs.
- Conducted 9 teacher workshops.
- Presented program for new Dade County Public School system teachers.
- Served as host site for Dade County "Envirothon".
- Judged Miccosukee students' school science fair projects.
- Completed K-Grade 3 Activity Guide for printing in FY 2000.
- Received \$21,000 Parks as Classrooms grant for Teacher's Activity Guide production, formatting and printing.
- Received \$20,000 Environmental Protection Agency grant for "Hands on Land" project.
- Produced 2,800 school visit books; distributed 1,900.

**Long Term Goal: By 2002, 15% of employee housing classified as being in poor or fair condition in 1997, have been removed, replaced, or upgraded to good condition.**

Everglades National Park has 59 housing units, including single family residences and apartments. Many of the housing units were built in the 1950's and 1960's and have deteriorated. The presence of lead-based paint and asbestos are added factors that significantly increase rehabilitation costs. Humid, summer weather requires off-season use of air conditioners in seasonal housing to reduce damage to appliances and furnishings. The park continues to address damages caused by Hurricane Andrew in 1992. Hurricane Georges, in September 1998, damaged screens, roofs and shutters in some park housing units.

The park is making progress towards the achievement of this goal. A full-time housing officer manages the housing program. A temporary maintenance position dedicated to housing repair and cyclic maintenance has been very successful in reducing the backlog of work requests. Partial or complete rehabilitation of housing units is undertaken as they become vacant. Funding has been requested to replace one 3 bedroom mobile home and to demolish one residence in the Flamingo area. At present, these projects are unfunded and the Flamingo unit has been deemed uninhabitable.

### Accomplishments

- Completed revision of Housing Management Plan for review by park management team.
- Completed removal of asbestos floor tiles from 6 units.
- Completed rehabilitation of 1 kitchen and 2 bathrooms.
- Completed bathroom rehabilitation in 8 apartment units.
- Repaired damage to screens, roofs, shutters resulting from Hurricane Georges.
- Awarded contract for installation of hurricane shutters on 10 housing units.
- Completed exterior painting of 1 housing unit (out of 8 planned).

## Tribal Relations



Miccosukee Indian students take part in an environmental education program with Sandy Dayhoff, Environmental Education Director.

**Long Term Goal: By 2002, issues of mutual interest between the park and the Seminole and Miccosukee Tribes are resolved through cooperative and coordinated working relationships.**

Tribal representatives are full partners in the ecosystem restoration planning and coordination, as part of the South Florida Ecosystem Restoration Task Force, its Working Group, and the Governor's Commission for a Sustainable South Florida.

Between 1964 and 1998, the Miccosukee Tribe of Indians of Florida used and occupied 333.3 acres along the northern boundary of the park by special use permit. In November 1998, Congress enacted and the President signed Public Law 105-313 providing for the Miccosukee Reserved Area within Everglades National Park. The legislation enlarges the area to 666 acres and provides for the permanent presence of the Miccosukee Tribe of Indians of Florida within the designated area for residential and administrative purposes. The park's administration is no longer responsible for routine review and approval of new developments in the area. The law requires water flowage easements and wildlife corridors through the area and calls for the Tribe to follow an environmental review process on new developments with opportunities for public review and comment.

The park continues to have a cooperative working relationship with the Miccosukee Tribe in areas of mutual assistance and interest, including environmental education, law enforcement, emergency response and structural and wildfire training.

### Accomplishments

- Presented curriculum-based environmental education programs to tribal children and staff.
- Maintained cooperative working relationships throughout the year with the Miccosukee Police and the Fire and Rescue Department.
- Received assistance from Miccosukee law enforcement and emergency medical staff on 12 incidents.



Prescribed Fire Specialist John Segar discusses the park's fire management activities with Miccosukee Indian students.

# Public Understanding and Support

**Long Term Goal: 60% of visitors stopping at public contact areas will understand and appreciate the park's significance and its role in the ecosystem.**

According to a visitor survey, conducted in March 1999, 86% of park visitors understand and appreciate the significance of Everglades National Park.

The park's five visitor centers are the primary facilities used to orient visitors to park resources and its significance and role in the ecosystem. With the exception of Flamingo, visitor centers were operated by uniformed staff daily throughout the year. Flamingo was staffed daily during the peak visitation months, December-April. It was open intermittently the rest of the year. On a parkwide basis, approximately 60-85% of interpretive personnel time is spent staffing visitor centers. An increase in the amount of time spent in explaining backcountry permits has been noted.

Throughout the year, the park's interpretive staff conduct programs and activities to enhance visitors' understanding of the park's significance and its role in the ecosystem. A full and varied schedule of interpretive programs was offered during the winter season. A three year project to replace all park wayside exhibits continued.

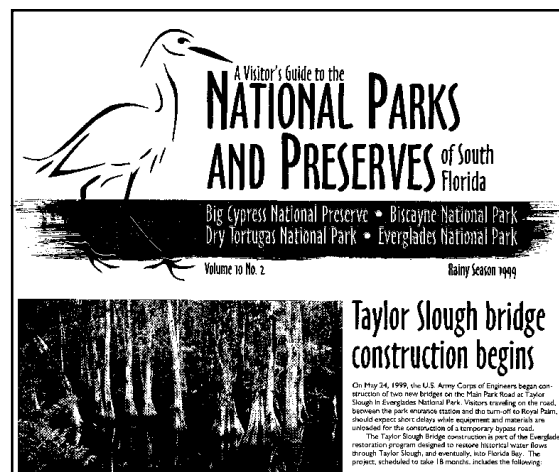
The park's educational efforts are assisted and enhanced by its partnership with the Florida National Parks and Monuments Association (FNPMA). The Association provided \$24,500 back to the park for support of interpretive and educational programs, special events, publications and the annual volunteer appreciation banquet. Park managers regularly attended FNPMA board meetings.

The park has an active volunteer program, particularly during the winter months. Volunteers work in all aspects of park operations, including administration, interpretation, resources management, research, and visitor and resource protection. Many of the volunteers have worked at the park for more than 3 years.

**Fee Demonstration Program:** A pilot interpretive fee program was launched in 1999. Special on-site and off-site group programs, customized to the specific needs and interests of a group, were offered through the winter season. Fee Demo Funding allowed the park to hire a seasonal interpretive ranger and special program aide to collect and process program fees and conduct the interpretive programs.

### Accomplishments

- 518,197 visitors were contacted at 5 park visitor centers.
- 64,000 visitors participated in ranger-led interpretive programs, including:
  - Flamingo: offered 42 interpretive programs/week during winter season, including daily bird walks, canoe trips, evening programs, and a new, twice-weekly children's program.
  - Gulf Coast: 2 ranger-led boat tours daily December-April; ranger walks at Big Cypress Bend Boardwalk Trail in Fakahatchee Strand State Park and talks at the Smallwood Store in Chokoloskee.
  - Pine Island: year-round, daily guided walks on the Anhinga Trail; Pinelands and Mahogany Hammock walks December-April.
  - Shark Valley: daily birdwalks and full moon bike hikes were very successful; 2 daily ranger-led trams December-April.
- Contacted 5,000 visitors on and off-site through the pilot interpretive fee program.
- Completed modifications and repairs to Coe Visitor Center exhibits to meet original contract specifications and enhance visitors' understanding of exhibits' intent.
- All visitors received a park brochure and newspaper when entering the park, 231,600 brochures and newspapers distributed.
- Revised park brochure to update information and incorporate new cover photo. Should be available for distribution by the end of 1999.
- Updated park newspaper twice a year (wet and dry season).



All visitors receive a copy of the South Florida parks' newspaper which contains issue-oriented articles and seasonal visitor information.



Ranger Steve Robinson discusses mangrove ecology while leading a canoe trip.

- Produced and distributed new site bulletins and guides, including Florida Bay site bulletin, Sandfly Island Guide, Guide to Wildflowers in Shark Valley, lobster brochure (in cooperation with Florida Keys National Marine Sanctuary and other local, state and federal agencies)
- Completed database for waysides and exhibit inventory.
- Completed bulletin board plan.
- Received and posted alligator warning signs.
- 234 volunteers worked 17,430 hours within all divisions and districts of the park; recognized at annual banquet.
- Provided daily telephone, answering, and information services with minimum interruption in service.
- Mailed more than 6,000 park information packets.
- Scanned 10 newspapers, including 4 major daily and 6 local weekly, on a daily basis; issue relevant clippings saved for parkwide/NPS and partner organizations distribution.

**Long Term Goal: By 2002, 60% of park visitors will have access to park and ecosystem information in their native languages and each Interpretive District will have at least one person on staff who can communicate orally and in writing in Spanish, French or German.**

The Visitor Services and Interpretation Division sought to increase interpretive opportunities for visitors with diverse languages, abilities, and cultural backgrounds.

Spanish/English site bulletins, and bulletin board displays for Chekika day use area are in development.

#### Accomplishments

- 66% of interpretive staff, during the peak winter season, was multilingual.
- 35 Spanish language programs were offered at Chekika during the peak season.

**Long Term Goal: By 2002, 60% of park visitors will have access to information about the human history and American Tribal cultures of the Everglades.**

The park seeks to enhance interpretive interactions with the Miccosukee Tribe of Indians of Florida.

#### Accomplishments

- Installed new "People of the Everglades" exhibit in the Ernest F. Coe Visitor Center.
- Held training session for Miccosukee teachers.
- Presented special program for guest of the Miccosukee Tribe.



Volunteer Ralph Espinola and a group of high school students complete a trash clean-up day at Chekika.

Visitors use a large map exhibit at the Ernest F. Coe Visitor Center to orient themselves to the park.



**Long Term Goal: By 2002, all key decisions affecting sustainability of the South Florida Parks and the ecosystem are favorable as a result of public support of park goals.**

Presentation of the park and its positions were handled in a manner consistent with agency policies and reflected well on the park and its image. Press coverage was generally balanced and positive. Factual, issue-oriented information was made available to the public through visitor programs, publications and services.

A Minimum Impact Boating Education Program, under development, will aim to reduce boater impacts on Florida Bay. The park participated in "Seagrass Awareness Month", designated in May by Monroe County.

The Everglades National Park web site increasingly served as a public communication and information tool, not only for those planning park visits but for people seeking information on park resources and issues.

Active liaison with elected officials, community leaders and groups, and partner organizations was developed and maintained throughout the year by park employees, in all divisions and at all levels. Park managers and staff participated in a variety of outreach programs, community meetings and public workshops.

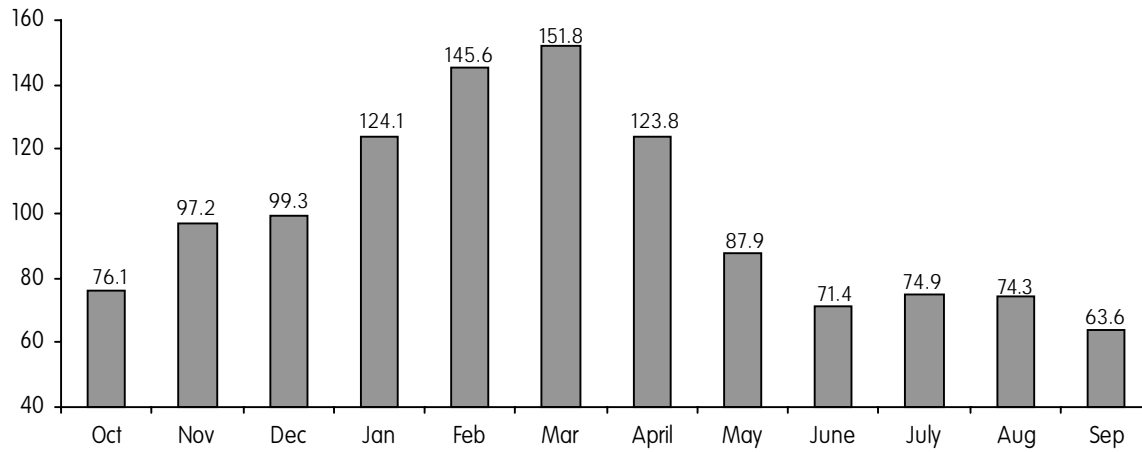
### Accomplishments

- Produced 6 new segments of "Waterways". A new contract was issued, so the program was out of production for two months.
- Produced 60 Seagrass Awareness Kits in cooperation with a multi-agency task force for "Seagrass Awareness Month".
- Updated and maintained web site, with an expanded FNPMA section and new sections on fire management, Florida Bay research news. User comments overwhelmingly complimentary.
- Recorded 3,301,028 "hits" on the park's web site.
- Issued approximately 60 press releases on operational and ecosystem restoration issues.
- Assisted in preparations for Congressional oversight hearings, including drafting of DOI testimony.
- Prepared FY 2000 park budget briefing statements and submitted to WASO.
- Coordinated and/or assisted in arrangements for 10 special orientation visits, including Congressional, General Accounting Office, State of Florida and environmental groups.
- Provided and/or arranged on-camera interviews for 22 television/news documentaries including National Geographic and Discovery channels.
- Designed, produced and distributed 1998 annual report.
- Provided professional orientation opportunities for more than 350 foreign park representatives.
- Prepared/submitted proposed 2<sup>nd</sup> phase work plan with budget for partner park program with Brazil.
- Supported 3 consultants for management planning project with Bahamas National Trust (BNT).
- Transferred surplus wildland fire truck to BNT.
- Prepared/submitted annual monitoring report for World Heritage Committee and concept paper on the park's prospects on the endangered list.
- Supported staff travel: wetlands seminar in Spain, World Heritage workshop in Russia, escort for Argentine park official on U.S. study visit.
- Supported an exchange visit by a fresh water ecologist from Countryside Council for Wales.
- Received, processed and coordinated filming requests according to NPS and park regulations and policies; issued and monitored filming permits for 45 projects.



## Monthly Visitation

FY 99

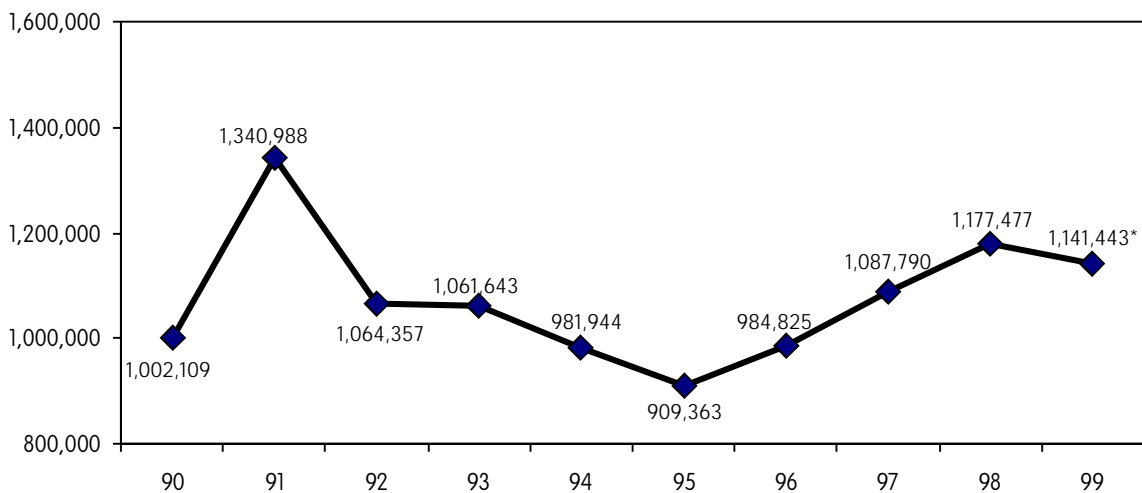


X 1,000

Monthly totals include recreational and non-recreational visits.

## 10 Year Visitation

1990-1999



\*The Shark Valley and Chekika areas were closed from mid-October through the end of the year due to high water following Hurricane Irene.  
The park's highest visitation occurred in 1972 with 1,773,302 visitors

# Human Resources

**Long Term Goal: By 1999, all computer users will have compatible software and hardware in support of NPS standards and are trained in the NPS standard programs.**

A full time information management staff maintains the network system, administers e-mail and provides day-to-day support of computer systems throughout the park. During FY 99, information management staff concentrated on upgrading the local area network and acquiring new NPS standard hardware and software to increase capability and meet Y2K compliance.

### Accomplishments

- Contracted for and installed 2 new Novell 5.0 servers and 3 new MS NT servers providing needed disk space for LAN users and providing 8 remote network connections to improve datafile transfer and sharing for outlying districts.
- Received and installed 92 new PC's via the NPS Y2K initiative.
- Identified DOINET connectivity shortfall. WASO approved a bandwidth increase from 64K to 128K Confirmed Information Rate-CIR.
- Coordinated the park's Y2K and embedded chip efforts.
- Responded to over 1,500 technical calls from park personnel.

**Long Term Goal: Through 2002, 100% of employees' performance plans are linked to appropriate strategic and annual performance goals.**

The purpose of the Government Performance and Results Act is to make government more effective and efficient. Toward that end, one of the goals established by the NPS in its 5-year Strategic Plan focuses on linking individual performance with organizational performance. There must be a logical connection between the work of an individual employee and the NPS mission and goals.

### Accomplishments

- 97 employees' annual performance plans are linked to appropriate strategic and annual performance plans.

**Long Term Goal: By 2002, 100% of permanent and term employees have essential competencies needs identified.**

Essential competencies are defined as the knowledge, skills and abilities required for employees to perform their jobs at the entry, developmental and full performance levels. Essential competencies and training needs have been established at a service-wide level for many NPS career fields, but not for all.

There is a need within the Human Resources office for someone with employee development experience. A vacant position has been redescribed to strengthen the training function and to oversee implementation of the Director's policy on supervisory training. Establishment of a database to track employees who need the mandatory supervisory training will make it easier to notify employees of requirements and obtain appropriate training courses.

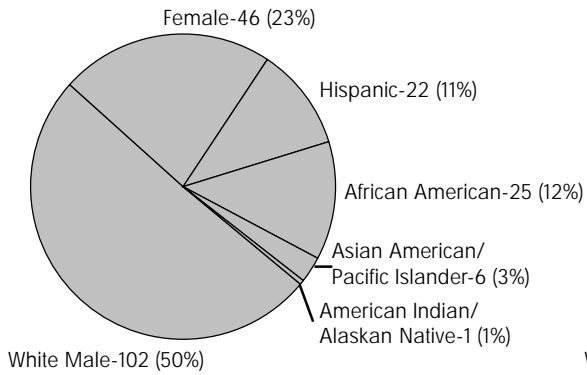
### Accomplishments

- 97 employees in key occupational groups have essential competency needs identified for their positions.
- Provided or sponsored training for Visitor and Resource Protection (R&VP) personnel in law enforcement, emergency medical services (EMS), motorboat operations, including:
  - 3-day FBI Officer Survival Course (18 participants);
  - FLETC Spanish for Law Enforcement Officers Course (17 participants);
  - Motorboat Operators Instructor's Course -MOICC (22 participants);
  - 3 R&VP rangers obtained Level I law enforcement commissions after successfully completed the 1200 hour Basic Police School at the Federal Law Enforcement Training Center.
  - 1 ranger trained and certified as Firearms Instructor;
  - Sufficient training was provided so that no qualified emergency responders lost certification.
- Completed a written field training and evaluation program for new law enforcement rangers, following completion of FLETC Basic Police School, and submitted to FLETC/WASO.

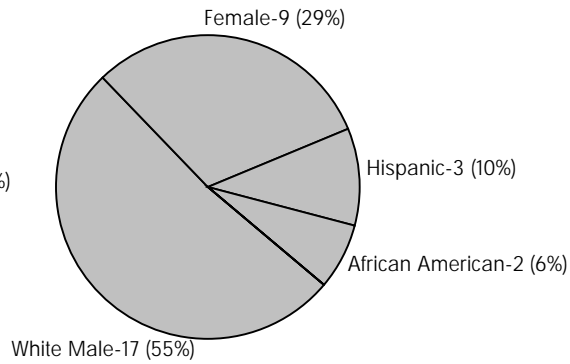
## Workforce Profiles

### Workforce Diversity

#### Permanent Employees



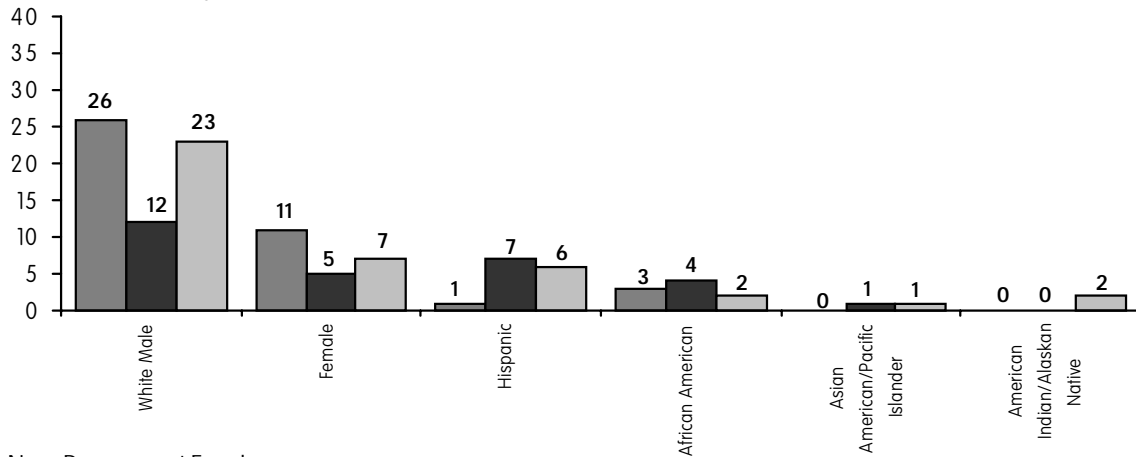
#### Non-Permanent Employees



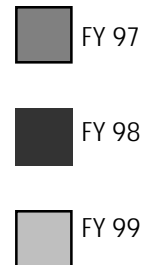
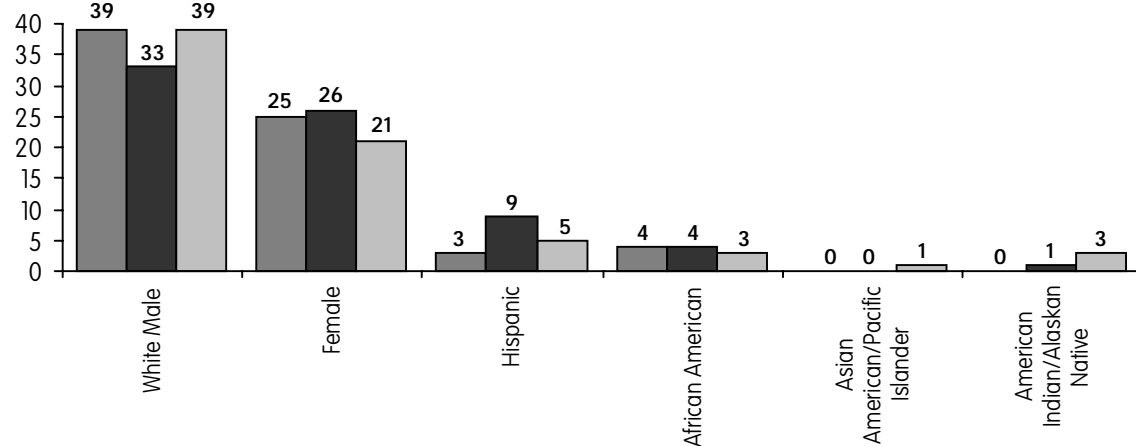
### Hiring Statistics

FY 97 - FY 99

#### Permanent Employees



#### Non-Permanent Employees



**Long Term Goal: By 2002, the park's annual new hires reflect the overall diversity of the civilian labor force.**

The Personnel Office at Everglades National Park services the five south Florida national park areas and the South Florida Ecosystem Restoration Task Force on all matters relating to recruitment/staffing for vacant positions, classification and position management, personnel actions, employee benefits, training, performance/misconduct, grievances and labor relations. During 1999, the office reorganized to devote the majority of one personnel specialist's time to performing classification. This has substantially improved the turnaround time on classification requests.

### **Accomplishments**

- Goal met - 20 of 52 employees in 4 targeted series in the park workforce are members of underrepresented groups.
- Position Classification, Recruitment, Vacancy Announcements:
- Issued 72 vacancy announcements, including 45 merit promotions, 17 seasonal and 10 temporary.
- Requested 38 Office of Personnel Management (OPM) registers, including 29 for permanent positions and 9 for term positions.
- Requested 20 seasonal registers from the NPS Washington Office.
- Participated in 14 job fairs, 8 of which were minority.
- Completed 40 classification requests as follows: Maintenance-9, South Florida Natural Resources Center-8, Administration-6, Interpretation-6, Biscayne NP-4, Dry Tortugas NP-2, South Florida Ecosystem Restoration Task Force-1.

### **Employee Benefits:**

- Conducted workshops during open seasons for the Federal Employees Health Benefits (FEHB), Federal Employees Retirement System (FERS) and Federal Employees Group Life Insurance (FEGLI) programs.
- Processed 60 enrollments during FEGLI open season.
- Provided notification and employee assistance during open for Thrift Savings Plan (TSP).
- Processed 6 (5 early out and 1 voluntary) retirement applications.
- Provided 29 retirement computation estimates.
- Processed 8 applications for military and/or temporary time deposits/redeposits.
- Processed 1 leave share application and 22 leave donation requests.
- Processed 47 awards (18 STAR, 7 On-The-Spot, 21 Time-Off and 1 quality step increase)
- Processed personnel actions and maintained Official Personnel Files (OPF's) for approximately 516 employees during peak season.

### **Employee Development:**

- Processed 108 SF-182's (training requests).
- Conducted 2 satellite broadcasts on diversity and the Government Performance and Results Act in the NPS.
- Conducted mid-career retirement planning training.
- Provided training to all employees on the new Employee Assistance Program (EAP) services provider.
- Conducted field workshops on the hiring process.

### **Performance/Misconduct/Labor Relations:**

- Notified all employees and supervisors of rights to union representation; employee performance planning and results reporting requirements; Individual Development Plans; leave policies.
- Conducted a session on "employee ethics" during an all supervisor's meeting.



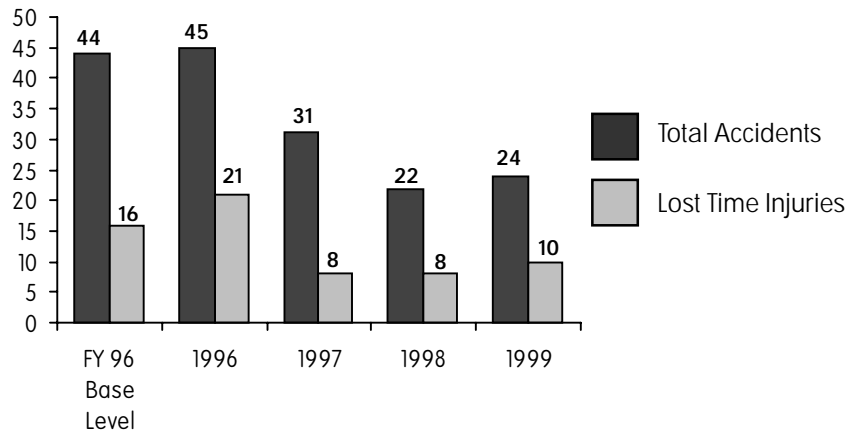
Employees wear appropriate protective clothing for work assignments and environmental conditions.

**Long Term Goal: By 2002, reduce by 50% from the 1996 levels, the number and severity of lost time employee injuries.**

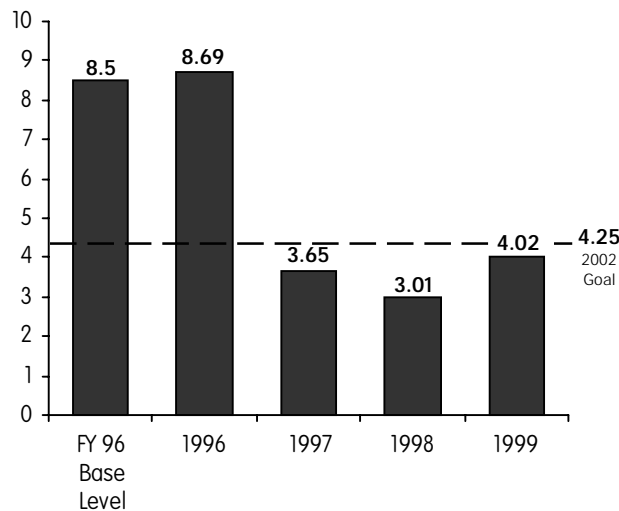
#### Accomplishments

- Met the FY2002 Lost Time Incident Rate (LTIR) goal of 4.25 with a LTIR of 4.02. All employee lost time injuries were analyzed by a Board of Review.
- OSHA 200 log is posted on employee bulletin boards throughout the park for notification and safety awareness.
- The Safety Officer reported employee injuries on a weekly basis to park managers.
- The Safety Management Information System (SMIS) is on line with 100% of employee accidents reported.
- Initiated a safety awareness award program.
- Obtained or provided safety training for supervisors and employees in the following areas: supervisor's role in accident reporting and SMIS; hazardous materials communication training for all who handle or may be exposed to chemicals in the workplace; confined spaces training; and the new employee assistance program (EAP).
- Phased out chlorine gas in the Flamingo Sewer Treatment Plant.
- Completed a Spill Prevention, Containment and Control Audit; resolution of noted deficiencies is underway.
- Safety Officer completed inspections of park and concession work areas.
- Board of Survey reviewed all major park property damage incidents.
- A Job Hazard Analysis program is in place throughout the park.
- Flight following is provided to all employee aircraft uses within the park.
- Provided eye protection (safety glasses), including prescription eyewear, and face shields to employees exposed to eye and face hazards.
- Visitor and Resource Protection (including Fire and Aviation Management) employees were provided with arduous duty physicals, blood-borne pathogen vaccinations, fitness testing and screening. A hearing conservation program directed toward park rangers was established.
- Required all employees who ride bicycles on duty to wear an approved helmet.

**Employee Safety Statistics  
FY 1996-1999**



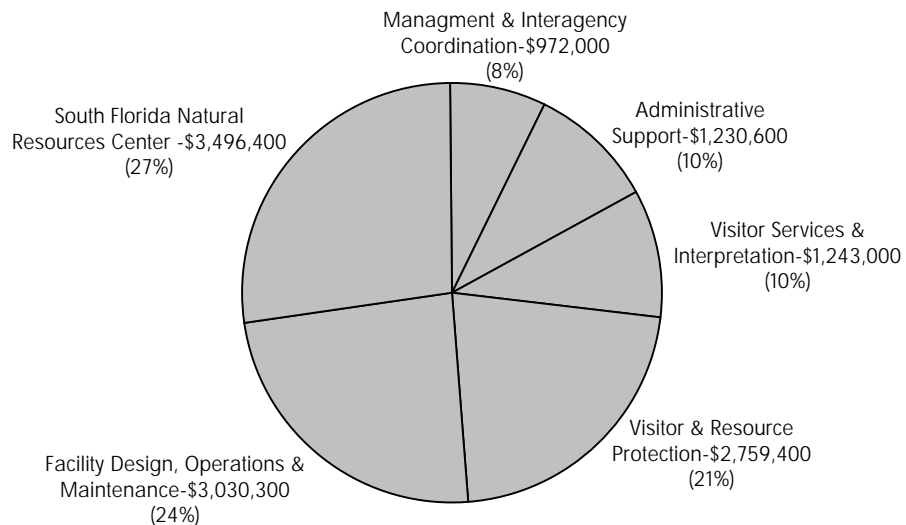
**Lost Time Incident Rate**



- Fire Management conducted one of the first national pack tests for NPS employees and others from state and local agencies.
- 22 students (14 NPS, including 6 from the park, and 8 cooperators) received MOCC/Motorboat Operator's Instructors Course.

# FY 1999 Operating Budget Base Allocations (ONPS) - \$12,731,700

## Financial Summary



### Funding for Special Initiatives & Programs

(Other than ONPS)

Critical Ecosystem Studies Initiative (CESI).....	\$12,800,000
Fee Demonstration.....	2,464,900
Cyclic Repair/Rehabilitation.....	919,000
Modified Water Deliveries Project.....	470,000
Hurricane Georges Damage and Recovery.....	289,000
Flamingo Water System.....	158,000
Hazardous Materials Removal.....	143,000
Equipment Replacement.....	123,000
Donations.....	69,100
Federal Highway Program.....	65,000
Parks as Classrooms.....	21,000
Air Quality.....	8,000
Volunteer-in-Parks Program.....	7,200

### Park Fees & Commercial Services Revenues

Entrance Fees.....	\$1,098,389
Campground.....	207,233
Passport Sales*.....	173,574
Commercial Tour Use.....	22,720
Boat Launch.....	65,125
Backcountry Permits.....	20,408
Special Programs.....	3,908
Concession Franchise Fees.....	199,430
Incidental Business Permits.....	29,160
Film Permits.....	685

\*Total Sales of Everglades NP  
Annual Permits, Golden  
Eagle and Golden Age  
Passports



Budget Analyst Richard  
Devenney

**Budget and Fiscal** branch staff supported Everglades and Dry Tortugas National Parks and the South Florida Ecosystem Restoration Task Force in all areas of budget and fiscal responsibility, including budget tracking, reporting, travel (temporary and relocation). FY 1999 closeout was successful. **Contracting and Property Management** staff provided acquisition services to Everglades and Dry Tortugas National Parks and the South Florida Ecosystem Restoration Task Force in the procurement of supplies and services and the management of government property.



Procurement staff Lesley Sytsma and Leanne Daniels work on Procurement Desktop, the new NPS acquisition software.

## Accomplishments

### Budget and Fiscal

- Processed all utility bills including telephone, electric, ensuring accurate charges, on time payment, and investigation/correction of irregularities or misuse of government-provided services.
- Used Federal Financial System (FFS) to input and track accounting data, including obligations, expenditures, transfers, bills of collection and deposits.
- Processed 780 travel authorizations and vouchers.
- Processed 17 permanent changes of station.
- Processed 61 Bills of Collection.
- Processed 17 Reports of Survey resulting in the disposal of 26 pieces of property/equipment (because the Board of Survey did not meet in FY 99, the Reports of Survey are not completed).
- Processed 70 Certificates of unserviceable property.
- Issued 11 new contracts in the amount of \$1,067,589.
- Modified 26 contracts in the amount of \$2,765,941.
- Completed 4,360 small purchase transactions totalling \$3,507,469.
- Concluded 39 new cooperative/interagency agreements in the amount of \$4,401,207.
- Modified 54 existing cooperative/interagency agreements in the amount of \$6,802,870.

### Contracting and Property Management

- Conducted unannounced property audits in each park location/division.
- Completed annual property inventory.
- Conducted two property accountability training sessions.
- Generated \$28,626 through two small lot sales of surplus property.

## Economic Value of Everglades National Park

In South Florida, a healthy environment means jobs for thousands of people in an economy that depends overwhelmingly on tourism.

The park uses the Money Generation Model (MGM) to provide current information about the role of the park in a regional economy. The MGM uses standard visitor statistics collected by the park and extrapolates direct sales benefits, tax benefits and job benefits. These figures illustrate the economic benefits directly attributable to Everglades National Park during FY 99.

Sales Benefits.....	\$139,558,025
Increased Tax Revenue.....	\$9,071,272
New Jobs Created.....	5,582

In addition, the visitor services and facilities provided by the three park concessions and the Incidental Business Permittees (IBP's) are economically important, as the following figures indicate.

Concession Gross Receipts.....	\$7,341,519
People Employed by Concessions.....	205
IBP Gross Receipts.....	\$2,313,141
People Employed by IBP's.....	approximately 380

## FY 2000 Budget Highlights

### Budget and Goals

#### **Resource Preservation and Management: .....\$4,860,600**

Everglades National Park actively manages diverse biological, hydrological and cultural resources to maintain, rehabilitate and perpetuate their inherent integrity.

Specific programs include:

- Tracking and management of specific ecosystem restoration projects, such as Modified Water Deliveries and C-111.
- Scientific research to provide accurate scientific information to guide management decisions related to ecosystem restoration.
- Inventory and monitoring to describe the marine, wildlife, aquatic, vegetation and archeological resources under NPS stewardship and monitor their condition to detect or predict changes.
- Long-term efforts to remove invasive, exotic plants such as melaleuca and Brazilian pepper.
- Efforts to stabilize or increase populations of threatened or endangered species, such as the Cape Sable Seaside Sparrow, American crocodile and the Florida panther.
- Fire management to maintain viable habitats for many species.
- Resource protection (law enforcement) efforts to protect resources from damage, loss, injury or mortality as a result of visitor activities.
- Compliance issues, including establishment of an oversight team for South Florida restoration projects.

#### **Visitor Services: .....\$4,128,300**

The National Park Service offers a variety of visitor services that allow the public diverse opportunities to experience and learn about the unique resources of Everglades National Park. \$640,000 in estimated fee revenues will be dedicated to improved visitor services.

Specific programs include:

- Operation and maintenance of visitor centers, campgrounds, environmental education centers, nature trails, canoe trails and wilderness campsites.
- Ranger-led activities, such as talks, walks, canoe and bicycling trips, and campfire programs which promote an understanding of the park's significance.
- Curriculum-based, environmental education program, now in its 29<sup>th</sup> year, which has introduced over 250,000 students to the Everglades.
- Management of activities related to concessions which provide lodging, food service and tours.
- Visitor protection activities providing for the protection, safety and security of park visitors, employees, concessioners, and public and private property.

#### **Facility Operations and Maintenance: .....\$3,127,900**

- Operation and maintenance of facilities for visitor use, such as the visitor centers, campgrounds, and roads and trails. \$825,300 in estimated fee revenues will be used to rehabilitate and upgrade visitor facilities, including boardwalk trails, boat/canoe launches, backcountry campsites, and replacement of wayside exhibits.
- Operation and maintenance of facilities that support the park's administrative and operational needs, including administrative and district offices, maintenance and utility buildings, research facilities and employee housing.

#### **Park Administration: .....\$1,271,200**

This program area includes management staff and the administrative support functions for the park, such as budget, contracting and procurement, property management, and human resources.

**Total: ..... \$13,388,000**



## Strategic Plan and Park Goals

The park's strategic plan has been rewritten and is undergoing review by park staff. It should be completed by March 31, 2000. Park management staff fine-tuned the park's long term and annual goals for FY 2000 and beyond. The revised long-term goals and the FY 2000 annual goals are presented below.

- By September 30, 2002
  - By September 30, 2000
- 1,220 acres in the Hole in the Donut are restored.
  - 820 acres in the Hole in the Donut are restored.
- Restoration of (X#) of acres in the C-111 basin, Florida Bay and (X#) of acres in the NE Shark Slough begins with the completion of 100% of pre-construction work to redistribute water deliveries.
  - 60% of pre-construction work is completed to begin restoration of (X#) of acres.
- 109,506 acres in the E. Everglades addition are protected through acquisition.
  - 109,506 acres in the E. Everglades addition are protected through acquisition (increase of 38,983 acres).
- 21,000 acres of disturbed park lands are restored.
  - 14,900 acres of disturbed park lands are restored (13,000 additional).
- 3 of the 14 threatened/endangered species populations in the park (incl. Cape Sable Seaside Sparrow, crocodile, eagle, panther, manatee, osprey) improve and 4 remain stable.
  - 3 T/E species populations improve; 4 remain stable.
- Phosphorus levels entering the park are 8 ppb in the Shark River Slough and 6 ppb in the Taylor Slough/Coastal Water Basin.
  - Phosphorus levels in the park are 8 ppb in Shark River Slough and 6 ppb in the Taylor Slough/Coastal Water Basin.
- 90 of the 120 standards for storage and protection of museum collections are met.
  - 90 standards for storage and protection are met.
- 0- of the 150 archeological sites in the park identified on ASMIS are in good condition; no sites have degraded from baseline conditions due to human activity.
  - 150 identified archeological sites have not degraded from baseline conditions (0- are in good condition).
- 8 of the natural resource data sets related to S. Florida ecosystem are acquired/developed.
  - 8 data sets are acquired/developed.
- 95% of park visitors are satisfied with appropriate park facilities, services and recreational opportunities.
  - 93% of park visitors are satisfied.
- The rate (25.62) of visitor accidents/incidents will decrease by 10% to 23.06.
  - The visitor accident/incident rate will decrease by 6% to 24.08.
- 65% of park visitors understand and appreciate the significance of Everglades NP.
  - 45% of visitors understand and appreciate the park's significance.
- 47,651 acres are conserved in the S. Florida ecosystem through acquisition by legislated partnerships.
  - 45,746 acres are conserved through legislated partnerships.
- 242 employees in 12 key occupational groups have essential competency needs identified for their positions.
  - 169 employees in 12 key occupational groups have essential competency needs identified.
- 242 employees' performance plans (100% of park workforce) are linked to appropriate strategic and annual performance plans.
  - 145 employees annual performance plans are linked to appropriate strategic & annual performance plans.
- 23 of 53 employees in 4 targeted series in the park workforce are members of under-represented groups.
  - 21 of 53 employees in 4 targeted series in the park workforce are members of underrepresented groups.
- 20 employee housing units classified in poor or fair condition are removed, replaced or upgraded to good condition.
  - 14 employee housing units are in good condition.
- The employee lost-time injury rate will decrease 50% from the park's 1992-1996 average (6.36).
  - The employee lost-time injury rate will decrease 30% to 4.45 (10 LTIs).
- All formal management decisions about resources and visitor impacts which potentially affect the natural and cultural resources of the park are based on adequate scientific information and do not cause any derogation of park values.
- The number of volunteer hours increases by 10% from 1997 totals.
  - Volunteer hours will increase 6%.
- The amount of receipts from park entrance, recreation and other fees increases by 20% from 1997 totals.
  - Fee receipts increase by 12%.

Everglades National Park qualifies as a world heritage site, a biosphere reserve, a wetland of international importance, and an outstanding Florida water & supports the largest stand of protected sawgrass prairie in North America & serves as a crucial water recharge area for South Florida through the Biscayne aquifer & provides sanctuary for 14 threatened and endangered species & supports the largest mangrove ecosystem in the western hemisphere & constitutes the largest designated wilderness in the Southeast that provides foraging habitat and breeding grounds for migratory wading birds & contains important cultural resources and is the homeland of the Miccosukee Tribe of Indians of Florida & functions as a nationally significant estuarine complex in Florida Bay, providing a major nursery ground that supports sport and commercial fishing & comprises the only subtropical reserve on the North American continent, presenting a major ecological transition zone where diverse temperate and tropical species mingle & functions as a major corridor and stopover for neotropical migrants in the South Florida ecosystem & encompasses resources that directly support significant economic activities & engenders inspiration for major literary and artistic works & offers a place where recreational, educational, and inspirational activities occur in a unique subtropical wilderness



UNITED STATES DEPARTMENT OF THE INTERIOR • NATIONAL PARK SERVICE

